Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

Aid Go 5

C
JAN 5 - 1945
GRICULTU•E

STAMP PLAN

CONSUMERS' GUIDE

APRIL 15, 1939

FLOORS

BOOKSHELF

PAWNBROKERS

RESEARCH

CONSUMERS' GUIDE

APRIL 15, 1939 VOLUME VI, NUMBER 1

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

NOT SPRING, but the need to economize sharply and still give as much as we can for the money, is responsible for our blossoming out in a new form with this issue, the first of our sixth volume. We have reduced the number of pages to 16 in each issue. This loss of pages is partly compensated for in the slightly larger page size.

Dates and frequency of issue also go on a new schedule. Hereafter the *Consumers' Guide* will appear on the first and fifteenth of each month from October through May. In June, July, August, and September—months when schools and consumer groups take time off from study—there will be one issue per month only. Each volume will, therefore, contain 20 issues.

Another slight change in the layout of pages, allowing a larger inside margin, we have been glad to make in response to requests from our favorite readers—the ones who value the *Guide* sufficiently to want to retain copies in a binder for future reference. Several inquiries have come to us from readers who want to know why we do not offer for sale binders in which copies can be neatly preserved. The answer is, we wish we could but we can't. There just isn't any way in which we can provide such a service.

"YOUR HONOR and Gentlemen of the Jury," the defense attorney said, "the Government has introduced what it calls test tube evidence. But I say to you, medical results are not determined in a laboratory but on human beings. Bedside tests are better than those from a test tube."

That was the plea a defense attorney made during the recent Milwaukee trial of a drug company which was being arraigned for violating the Food and Drugs Act.

Chemists, physicians, and vitamin experts had followed each other to the witness stand to testify on behalf of the Government.

Chemists said that the drug, a so-called vitamin preparation, contained milk sugar, wheat starch, wheat bran, and a trace of miscellaneous matter.

Vitamin experts testified that it contained fewer vitamins than a third of a pound of oatmeal.

Retailing at $1.50 a bottle, this preparation contained practically no Vitamins A, C, and D, and only insignificant amounts of Vitamins B and G.

To get enough Vitamin D from this preparation to last you a day a dose of 3,000 pills would be necessary. A dose of 1,000 pills would hardly give you enough Vitamin A to carry you through the day. For your quota of Vitamin B you would have to take 150 of these pills, and for your daily allowance of Vitamin G you would need 25 pills.

Doctors testified that the drug could not possibly have had a beneficial effect on the diseases it pretended to cure.

Against this testimony the defense attorney produced witnesses who said that they had been helped by the drug.

"Now," the defense attorney asked, "whom are we to believe, these good people who have actually been helped in their suffering, or these doctors who play around with test tubes and white mice?"

Answering, the jury said, "The doctors and test tubes. We find the defendants guilty as charged." The judge fined the defendant on each count, and later said, "I have a firm conviction of the guilt of the defendant."

PLUGGING UP THE HOLES in cheese regulations, the Food and Drug Administration recently announced that limburger and roquefort cheese must carry net weight legends on their labels after June 25, 1939, the date all the provisions of the new Food, Drug, and Cosmetic Law go into effect.

"WHENEVER in the judgment of the Secretary (of Agriculture) such action will promote honesty and fair dealing *in the interests of consumers,* he shall promulgate regulations fixing and establishing for any food under its common or usual name so far as practicable, a reasonable definition and standard of quality, and/or reasonable standards of fill of container. . ."

These significant words appear, in case you have forgotten, in the Food, Drug, and Cosmetic Act of 1938.

Establishing just what is in the interest of consumers is difficult if consumers don't tell the Secretary just what they think their interests are.

At the hearings which have been held and are being held, however, consumers have not let the Secretary down. They have appeared, and they have testified with unmistakable articulateness.

Up for hearings this month are 45 canned vegetables for which standards of identity must be determined. Among the foods for which hearings are soon to be held are: flour, bread, farina, semolina, and rye flour; cream, whipping cream, evaporated milk, dried skimmed milk, and sweetened condensed milk.

"RUN OF THE MILL" is a phrase which should no longer have the run of a department store as the result of a recent decision by sheet manufacturers to adopt standard terms in the sale of sheets and pillowcases.

Sheets and pillowcases, under the agreement, which fall below first quality after July 1, 1939, will be described as "irregulars, second quality, second selection, or seconds." "Run of the mill" and "run of the loom" are banned as misleading.

Identification of second quality sheets will be made either on the sheets themselves or on their labels. The action was announced as the first instance of voluntary labeling standardization yet undertaken by the cotton industry.

DEFENDING the purity of the language, not to mention the interests of consumers, the Federal Trade Commission has ruled that cucumber cream should contain a significant amount of cucumber; pepsin products should contain enough pepsin to possess substantial therapeutic value; olive oil soaps should contain olive oil; lead and zinc paints should actually contain significant amounts of lead and zinc.

When olive oil or olive is used alone in advertising a soap the Federal Trade Commission specifies that the soap must be made wholly of olive oil or olives; however, a company may advertise this provided it also advertises in an equally conspicuous manner just what other oils have been used in the soap. Where all the oils are listed they must be listed in the order of their predominance.

LEAD and zinc paints caught the FTC's eye when a Kansas City, Missouri paint dealer advertised his paints as containing lead, zinc, and linseed oil when they actually contained such small amounts of these ingredients that the paint was practically worthless.

565558

An Experiment in Better Nutrition

The stamp plan of the Federal Surplus Commodities Corporation offers a new attack on the old problem of moving farm surpluses into the homes of needy consumers

WHEN the supreme autocrat of a foreign despotism decided years ago to build a railroad, he took a foot rule out of his desk and drew on a map of his domain a pencil line between two cities he wanted connected. Calling in an engineer, he said: "Build me a railroad along that line."

Building lines of communication between producers and consumers is not as simple a job as this. If a map of such existing lines could be drawn, it would show them twisting, turning, doubling back, and snaking all over the country. Not all of these convolutions are absolutely necessary. Some of them are not necessary at all. Many fail to move all the traffic that could move over them, to the detriment of farmers, consumers, and the trade itself.

People have been looking at these confused traffic lines of commerce for some years. They see at one end billions of pounds of farm supplies, produced for consumption, but not getting into consumption. They see at the other end millions of consumers on short rations. Government has been attempting since 1933, first through the Federal Surplus Relief Corporation and then through the Federal Surplus Commodities Corporation, to bring surplus supplies and needy consumers together. In 5½ years Government has bought 5 billion pounds of potatoes, wheat, apples, and dozens of other foods and given them, through relief agencies, to families victimized by depression. This year, with surplus supplies of farm products mounting higher than ever, the need for opening up the traffic lines from farm to consumer has become more acute.

Several months ago the Secretary of Agriculture proposed that a new method be developed for coping with this grave problem. Instead of short-circuiting the distance between surplus on the farm and want in the cities—not merely because short-circuiting may injure the people now functioning on the traffic lines of commerce but also because these people can lend immense aid in moving these vast quantities of foods—the Secretary called upon the Federal Surplus Com-

modities Corporation to evolve a system which would use the normal channels of trade and yet move more food to needy city consumers.

TURNING ITS MIND to this problem, the FSCC has worked out just such an invention. This invention applies a magnet to the end of the traffic lines of commerce where goods come out to consumers. It is designed to pull surpluses off the farm, draw them through regular distribution channels, so that they pass through commercial distributors, wholesalers, truckers, retailers—to be discharged finally into the market baskets of low-income families.

Stamps are the magnet. The way they are expected to work is this. Families certified for public aid will be offered the chance to buy orange-colored stamps. These orange-colored stamps will serve as purchasing power at any grocery store. To those who buy the orange stamps, blue-colored stamps will be given free. Blue and orange stamps will be bound together in one stamp book. The value of blue stamps given will be 50 percent of the value of orange stamps purchased. These blue stamps will buy certain surplus foods at any grocery. By joining in this plan, families can buy not only more food but, it is hoped, a better balance in the kinds of food, since blue stamps will encourage the purchase of many of the vitamin-rich foods which low-income families now cannot afford. These purchases will help to move a greater quantity of farm supplies into consumption, and by increasing the load on regular commercial traffic lines, the costs per pound of food handled should be reduced to the benefit of everybody.

Families eligible to participate in this plan include WPA workers, mothers receiving pensions, folks receiving old-age pensions, unemployed who are getting public assistance. All of these persons, in the cities selected for testing the stamp plan, may, if they wish, buy orange stamps which will be issued by the Government. They will have to buy books containing enough orange stamps to equal $1 a week for each member of their families if they want to get the bonus of blue stamps. No one will be permitted to purchase more than $1.50 worth of orange stamps for each member for each week.

A WPA WORKER with a wife and 2 children, for example, may decide to buy from $4 to $6 of orange stamps, in denominations of 25 cents. For every dollar's worth of orange stamps purchased, he will receive 50 cents worth of blue stamps. With the orange stamps, he can buy any food and household supplies sold in a food store, but not tobacco, beer, wine, or liquor; nor will these stamps pay for foods eaten on the premises. Blue stamps, which also come in 25-cent denominations, will be good for the purchase of foods listed as surplus. Right now the FSCC is distributing, through relief agencies, such foods as dried beans, oranges, grapefruit, butter, dried fruits, and prunes. It is reasonable to assume that foods such as these and others later designated by the Secretary of Agriculture as surplus will be on the list which families will be able to select with the free blue stamps.

ORANGE and blue colored stamps are the newly devised magnets by which the Federal Surplus Commodities Corporation hopes to pull surpluses from the farms and through commercial channels onto consumer tables where they can be eaten by the undernourished third of America. Families certified by Government agencies will buy the orange stamps and get half as many free blue stamps in addition. The first will be good for the purchase of any food, the second will buy foods that have been designated as surplus by the Government.

The orange-stamp minimum purchase of $1 a week per person (a bare 15 cents a person a day) was decided upon to discourage families from replacing the food they formerly bought for cash with food bought with the free blue stamps. The $1.50 per person per week represented by the orange plus blue stamps is just about the least amount at present city food prices with which the kinds and quantities of food necessary to maintain an adequate diet can be purchased.

"THE CONSCIENCE of the American people has long been shocked," Secretary Wallace has stated in explaining the stamp program, "by the paradox of farmers impoverished by abundance while at the same time millions of consumers were hungry for food which was rotting because the price for it would not pay the cost of harvesting and transportation.

"The proposed plan aims directly at increasing the domestic consumption of surplus food commodities. Issuance of the stamps will create purchasing power for commodities which are surplus now not because the need for them does not exist, but because the persons who need them most cannot buy them.

"Records of Public Health services and studies by the Bureau of Home Economics indicate widespread malnutrition and undernourishment, particularly on the part of children, in the homes of needy families in every State in the Union. Estimates have been made that many millions of people in the United States spend an average of $1 or less a week for food.

"Think of it; less than 15 cents a day per person for food! Such wholly inadequate expenditures mean price-depressing surpluses for farmers and diets for low-income families that are less than the minimum necessary to maintain adequate standards of health. The proposed plan is designed to raise this average to $1.50 a week per person for those eligible to participate in the program.

"It is our sincere hope that this plan in operation will prove the most simple and practical method developed so far for getting an increased flow of surplus agricultural commodities into the hands of those who need them."

From the physicians and specialists of the United States Public Health Service comes the assurance that the new plan may develop into one of the most far-reaching public health measures the country has ever sponsored. By insuring greater amounts of wholesome food to millions of undernourished families, they say, this plan may be the beginning of an historic contribution to the good health of America.

TWO METHODS for distributing the orange and blue stamps are to be tried out during the preliminary testing period.

By one method, people receiving WPA wage checks, and families receiving assistance from other public agencies, will indicate that they want to participate in the plan and how many orange stamps they wish to buy. Then when their weekly, bi-weekly, or monthly checks are issued, they will be issued for the regular amounts minus the value of the orange stamps ordered. When the checks come, each check will have attached to it a book containing the orange stamps the family has ordered, plus the free blue stamps amounting to half the value of the orange stamps. The check will be equal to the regular allowance or wage less the value of the orange colored stamps.

By a second method, families will simply buy orange stamps for cash and receive their blue stamps free at some designated office after they have produced identification cards indicating the size of their families and their right to get stamps.

Some families on relief now get such small sums on which they must live that they cannot, even if they wish to, purchase the minimum of $1's worth of orange stamps for each member of the family each week. In parts of the South, for example, there are families receiving from public funds not more than $6, $7, or $9 a month to cover everything. The diets of such families inevitably are dangerously below the safety line. To require a family of 4, attempting to eke out an existence on such allowances, to purchase a minimum of $16 of orange stamps a month in order to get the free blue stamps, would be unrealistic. For them, therefore, special provision is made to waive the orange stamp requirement and make direct gift of blue stamps.

STAMPS WILL BE TAKEN by the families to the stores where they ordinarily shop or any other store joining in the plan. Purchases will be made at the prices that prevail in the store. As families do their shopping, they will tear stamps out of the book. Stamps will not be accepted by grocers unless they are torn out of the books in their presence. The stamps are not to be sold or exchanged; they must be used by the family to whom they have been sold. To buy new books of stamps, families will have to turn in covers of their used books.

Once the grocer takes the stamps in exchange for food products, he will paste them on a card and turn them in to his bank, or to his wholesaler, who will act as agent for the retailer in getting money from the Federal Treasury. The orange stamps will already have been paid for by the relief families; so their redemption will cost the Government nothing. Since the blue stamps will be given away, the Government will have to pay cash-out-of-pocket to redeem them. Funds for this purpose come from the same source as the funds which have heretofore been provided by Congress for the purchasing of surplus foods for direct distribution.

NO BUSINESS or commercial interest should suffer any economic disadvantage from such a plan. On the contrary it uses normal commercial agencies in the business of processing and distributing foods. There is no more red tape attached to it than there is to any purchase. It follows along the traditional economic trails.

Operation of the plan should stimulate competition among retail stores for the enormous new market for foods which it creates. As a result of the increased volume, unit costs of handling foodstuffs may be lowered and consumers not on relief would, in that case, benefit as a result of the plan.

"The greatest potential value of the plan," says the FSCC, "will be realized if, because of aggressive merchandising, *all* consumers are enabled to increase their purchases and consumption of surplus commodities."

In this stamp plan it is assumed everybody is going to play fair. Penalties, nevertheless, are provided for failure to play square. There may be a few chiselers, and possibly these few will get attention a million times magnified beyond what they deserve.

Against misrepresentations of the way the plan is working, reliance must be placed on the fairness of the people who don't take part in it. They will have to weigh carefully any charges of chiseling. One person may get the headlines for breaking the rules, while thousands of people are observing them.

[*Concluded on page 8*]

CHIEF argument for the new stamp plan is that it works just the way any other purchase works. You take the stamps to your store and spend them like money. Stamps spent, like dollars spent, start goods moving through the arteries of business.

SHELLAC finishes may be cleaned with steel wool saturated with clean turpentine. To remove water spots from shellac finishes moisten a soft cloth in a half-and-half mixture of denatured alcohol and water.

Finishing Your Floors

For consumers lucky enough to have floors that deserve preserving, knowing rules to follow in finishing, refinishing, and maintaining surfaces can save effort and money

IN a famous palace in Prussia, tourists, practically pop-eyed from the splendor, were required to slip fur overcoats over their shoes so they wouldn't scratch the polish on the highly waxed floors. The palace was misnamed "San Souci"—or "Carefree," to slip back into English. "Carefree" was not exactly the word for the back-breaking care those floors took from the servants.

Now most American homes are made to live in and not for the purpose of having guides lead tourists around in them. So there is very little demand for the kind of floors you can only tread with a pair of fur boots. Housewives want polished floors, however, to reflect their pride in their homes. And they want them polished so floors won't be so hard to keep clean.

Electricity, speakers keep saying over and over again, is man's willing slave, and the housewife's. Thousands of slaves in fact. But when you get around to it, electricity hasn't got into nearly enough homes to free American housewives from avoidable drudgery.

This is one of the two essential nubs in the floor-finishing problem, for the best way to finish floors is with electrically powered machines, which most consumers can't afford to use. The other nub is that there are too many American families living in houses so bad that a delicately phrased article on the finish of floors sounds like a sublime *non sequitur.* We need homes fit to live in, millions might say, before you tell us to wax our floors.

PLAINLY NO ONE is trying to talk floor finish to people who have major problems that come far ahead of their floor finishes. Here it is proposed to give some floor finishing advice to those who are lucky enough to live in something better than the houses euphemistically labeled "sub-standard."

If your floor has been finished at all, it has very likely been finished with one of four preparations—linseed oil, floor seal, shellac, or varnish.

Linseed oil was the choice of householders in the days when everything that went into a house was massive and every operation was a hand operation.

Recently, however, preparations known as floor seals have been placed upon the market for those consumers who like the appearance of the old-time oil finish but who do not like the labor involved.

Householders who prefer highly polished floors use shellac or varnish well waxed. Of these, varnish is the more durable. It is also less likely to scratch. Nor does it have the tendency of shellac to turn white when water drops on it. Shellac is used, despite its disadvantages, because it dries so quickly that a floor may be walked on 24 hours after it has been shellacked.

All four finishes—oil, seal, varnish, and shellac—should be waxed every 4 or 6 months. But shellac floors should not be waxed with preparations containing water. For shellac a paste wax should be used instead of a water emulsion wax.

TO KEEP FLOORS clean between waxings, all that you need to do is to sweep them (you didn't have to be told that), and dry mop them. For the dry mopping, use a soft

cotton floor mop kept barely dampened with a mixture of 3 parts kerosene and 1 part paraffin oil. When the mop gets dirty, wash it out in hot water and soap, dry it, and dampen it once more with the kerosene and paraffin prescription.

When a spot of dirt on your floor stubbornly resists simple mopping, go after it with a pad of fine steel wool dipped in turpentine.

If the finish is a floor seal, you will occasionally come across gray spots which have been caused by water allowed to stand on the floor for a time. Turpentine does not help here. Instead, sandpaper the spot away, patch it up with floor seal, and buff it smooth again with steel wool.

Varnish ordinarily will not spot with water scars. But when it gets very dirty, it requires rather drastic action. Liquid varnish remover is first applied to the sore spot, then it is sandpapered, the spot is dusted clean, and finally floor varnish is applied to the wound.

Shellac finishes may be cleaned with steel wool that has been saturated with clean turpentine. Water spots will come out if rubbed lightly with a soft cloth that has been moistened in a half-and-half mixture of denatured alcohol and water.

EVENTUALLY FLOOR finishes do wear down to the point where they need refinishing. How this is done depends upon the type of finish that must be stripped away.

Floors that have been finished with oil respond only to the most vigorous treatment. Where a steel wool buffing machine is available, it may be possible to remove the finish by machine buffing with a No. 3 steel wool. If no buffing machine is at hand, or if it won't remove the finish, chemical treatment is necessary. Mild alkalies—a water solution of trisodium phosphate, washing soda, a commercial cleanser, or lye—any of these will change linseed oil to soap. But do not use too strong a solution. Too strong an alkali swells and softens wood.

In applying the chemical treatment the alkali solution should be flushed over a small section of the floor at a time. After letting it stand a few minutes, scrub the floor with a stiff brush or a No. 1 steel wool.

The scrubbing will produce a soapy solution which should then be removed by flushing with clean water. Mopping and drying follow this operation.

Occasionally floors will turn gray under this treatment. In this case the floor should be bleached with a saturated solution of oxalic acid in water. More care is required here, for oxalic acid is a poison. After it is applied, the floor should be rinsed with clean water, mopped, and given a chance to dry completely.

Varnish finishes may be removed either by an electric sanding machine or with a liquid varnish remover. Alkaline solutions in water, or powders which are dissolved in water, should not be used for this purpose. When you shop, specify "liquid varnish remover," and ask whether or not it contains water.

Directions will accompany the remover, and they should be followed carefully. Once the varnish is removed, rough spots should be sandpapered smooth.

Where a shellac finish is beyond salvaging and a sanding machine is not available, it may be removed by washing the floor with a neutral or mildly alkaline soap and as little water as possible. After the soaping, the floor should be rinsed with a minimum amount of clear water, and then scoured with a No. 3 steel wool and a "half-and-half" mixture of denatured alcohol and water. Another rinsing with clean water follows this operation.

BEFORE GETTING DOWN to the work of applying a finish to these old floors, however, let us also assume that you have a new floor to be finished.

The initial and most important step in finishing floors is scraping. Originally this operation was done by hand. Today an electrically operated sanding machine is used. Where householders are supervising the building of their own homes, they should make sure that the bearings in the machine are well aligned. They should also make sure that the scraping machine is operated by a man who specializes in floor sanding.

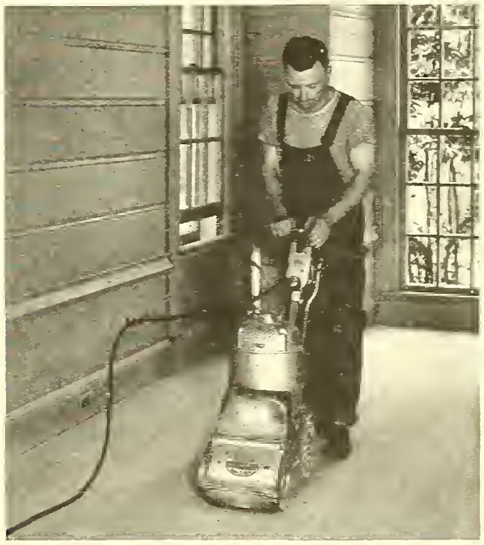
After a floor has been sanded, it should be swept clean and a careful inspection made for scratches, waves, or blemishes.

Hardwood floors require an additional step before the finishing operation actually begins. Before applying varnish or shellac to a hardwood floor, wood paste filler is rubbed onto the flooring to fill up the wood pores. Wood filler can be used either colored or colorless.

Householders may want to stain their floors. This step in floor finishing also precedes the application of the finish. If any stain is to be used, it should be an oil stain. If the floor is to be finished with a floor seal, preparations may be obtained which combine floor seal with the oil stain. This preparation, however, should only be used for the first coat.

The seal should be permitted to dry somewhere between 15 minutes and 2 hours. Just how long depends upon the seal, but if the

BEFORE putting varnish or shellac on a new hardwood floor, paste filler is rubbed on the wood to fill up the pores. Such fillers come either colored or colorless.



SANDING a new floor is one step in the finishing process that needs more than the amateur touch. Even if you do all the other work yourself, this part of the floor finishing should be done by an expert.

IF YOU DECIDE that your floor is beyond simple refinishing and a new floor is required, lay it right on top of the old floor and at right angles to the old one.

directions accompanying the seal are not explicit, householders can make trial tests themselves on the edge of the floor. The trick is to start the next operation, which consists of wiping up the excess seal with clean rags or a rubber squeegee, before the seal begins to gum.

After the excess seal is wiped away, the floor should be buffed either by hand with No. 2 steel wool, or with a power machine. The floor then should be swept clean and a second coat of seal applied.

SPECIFICATIONS FOR FLOOR shellac are precise enough. For their floors consumers should insist on 5-pound cut shellac varnish, unadulterated with resins. Besides they should insist that it be either freshly manufactured or packed in glass containers. The shellac should then be thinned with 188 proof No. 1 denatured alcohol at the rate of 1 quart of alcohol to 1 gallon of shellac.

The first coat of shellac should dry for 15 or 20 minutes, and then the floor should be buffed lightly with sandpaper or steel wool and swept clean.

The second coat of shellac should be permitted to dry for 2 or 3 hours, buffed lightly again, swept, and then the third coat should be applied. Best practice is not to walk on the floor till the following day. If it is necessary, the floor may be used within 3 hours after the application of the last coat. If the floor is to be waxed, the waxing should wait at least 8 hours after the application of the third coat.

Varnish labels tell how varnish should be applied to floor for sure-fire results. To resist an over-persuasive label, consumers should remember to use only a floor varnish on their floors. All-purpose varnishes do not finish floors as well as varnishes designed only for floors.

If paste filler is applied to the floor before the varnish, or if shellac is used as the base of a varnish finish, only two coats of varnish are needed. Where varnish is applied directly to the bare wood, three coats will be needed.

Varnish should be put on a clean floor, with a clean brush. During the varnishing, the temperature of the room should be maintained at 70 degrees or higher, and plenty of fresh air should be kept circulating in the room.

ALL TYPES OF FLOOR finishes should be waxed. This is done most efficiently and most simply with a power waxer and paste wax. First the paste wax is mopped onto the floor, and is permitted to stand for 15 to 30 minutes. After this the floor is polished with the machine.

For persons who cannot afford polishing machines, there are water emulsion waxes which are mopped on to a floor and permitted to dry without further polishing. But these cannot be used on shellac floors because they may turn the shellac white.

In some homes floors receive no attention at all, with the result that when something is decided to be done about them it will frequently be found that not only the floor finish but also the floor itself will have to be renewed. When that time comes flooring experts advise that the old floor be leveled off and made tight, and the new floor laid right on top of it.

The top new floor should be laid at right angles to the old floor. If there were squeaks in the old floor, these can be overcome by ample and thorough nailing. Nails in this job are squeak insurance.

Installing the new floor may solve other problems, too. If the old floor was damp or cold, a 15-pound, asphalt-saturated felt paper should be placed entirely over the old floor before the new one is laid. This is especially essential on the first floor. It will tend to keep cellar moisture from reaching the bottom of the finished floor and prevent expansion and warping. This paper also acts as a sound deadener and helps to prevent squeaks. For rooms directly over the heating plant it is advisable to use double-weight, 30-pound, asphalt-saturated felt, or a standard insulating board one-half inch thick. This will provide insulation against excessive heat.

For the family that has made up its mind either to go at its floors seriously or to build a house, the Division of Forest Products of the Department of Agriculture's Forest Service has prepared a useful and thoroughgoing pamphlet. "Selection, Installation, Finish, and Maintenance of Wood Floors for Dwellings" is its title; 489 the number. It may be had by sending 5 cents in cash to the Superintendent of Documents in Washington, D. C.

AN EXPERIMENT IN BETTER NUTRITION

[*Concluded from page 5*]

There is nothing dogmatic about this experiment in better nutrition. If the difficulties it provokes can't be overcome, the plan will be overhauled or abandoned. It is frankly an experiment. So, before it actually goes into effect, it is to be given a preliminary trial in a limited number of representative cities, each with 50,000 people or more, in widely separated parts of the Nation. During the preliminary trial, careful studies will be made of the plan's operation. Parts in the machinery that show flaws will be adjusted. The present Federal Surplus Commodities Corporation program of direct purchase and distribution of surplus foodstuffs will be continued everywhere except in those cities where the new plan is in effect.

IMAGINATIONS have been captured both by the purpose of the plan and by the opportunity it presents to everyone to help solve a grave national problem. Already average citizens as well as the leaders in many cities have hastened to ask that their communities be selected as testing grounds. Bankers, grocers, wholesalers, chain-store companies, chambers of commerce, welfare workers, and just plain Americans have asked for the honor of participating in the first tryouts.

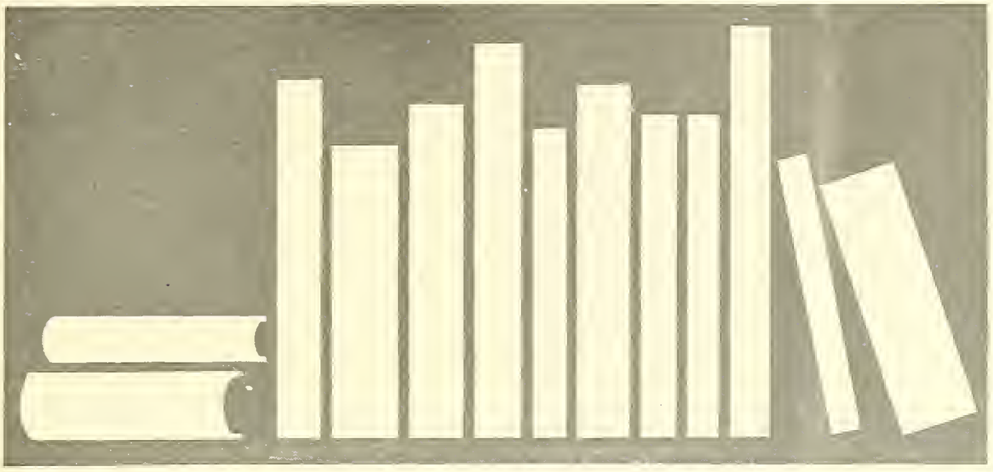
The food industry itself, through a National Food and Grocery Conference Committee—an organization which represents chain stores, independent grocers, wholesalers, and food processors—has been cooperating from the start with the Government agencies working on the plan.

"We have unanimously agreed," says the Committee's spokesman, "that this plan represents a most constructive and helpful proposal to alleviate what has always seemed a terrible tragedy in America: large surpluses of agricultural products on the farm and many thousands of people undernourished in the cities and towns."

No one has quoted a working farmer on the plan yet, nor a WPA worker receiving $48.50 a month for himself and his family of 5. But the farmer very likely will say, "I don't like to see food rotting on the ground. The AAA is doing what it can to help us to produce more of what we need and less of what we don't need, but that doesn't mean that we should waste our surpluses when we have them. I think the idea is to control our surpluses before they control us."

And the WPA worker will say, very likely, "I wish the kids weren't so pale and thin."

Maybe these are the quotations to remember when the plan is tried.



CONSUMERS' BOOKSHELF

THE NEW FOOD, DRUG, AND COSMETIC LEGISLATION. Law and Contemporary Problems, Vol. 6, No. 1, Winter-1939. Address: Law and Contemporary Problems, Duke University, Durham, N. C. 75 cents. A symposium dealing with the historical background of the Food, Drug, and Cosmetic Act of 1938, its statutory structure, practical problems of enforcement, and social and economic effects. Other articles consider the Wheeler-Lea Act, State food and drug laws, and the representation of the consumer interest in the Federal government.

CONSUMER COOPERATIVES VERSUS PRIVATE ENTERPRISES, by Wilford L. White, Chief, Marketing Research Division. 1938, pp. 12, mimeo. Address: Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, Washington, D. C. Free. A talk given before the Forty-fourth Annual Convention of the National Wholesale Hardware Association, Atlantic City, N. J., October 20, 1938. Discusses the importance and growth of the cooperative movement. Considers factors affecting the spread of consumer cooperatives and suggests future courses of action relative to these conditions.

REPORT ON DEVELOPMENT AND USE OF RAYON AND OTHER SYNTHETIC FIBERS, prepared by a Committee appointed by the Secretary of Agriculture. 1938, pp. 50, mimeo., illus. Address: Bureau of Chemistry and Soils, U. S. Department of Agriculture, Washington, D. C. Free. The manufacturing processes of rayon, factors influencing its use, uses to which rayon is and is not suited, and supplies and sources of raw material for the industry are discussed. Contains statistics on production and consumption of rayon. A brief discussion of glass and casein staple fibers is also included.

SELECTION, INSTALLATION, FINISH, AND MAINTENANCE OF WOOD FLOORS FOR DWELLINGS, by R. K. Helphenstine, Jr., U. S. Forest Service, Circular No. 489. 1938, pp. 26, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents.

OUR SOIL—ITS WASTAGE—ITS PRESERVATION, by Soil Conservation Service, U. S. Department of Agriculture. 1938, pp. 20, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Sets forth some of the causes of man-induced erosion in parts of Nebraska, Kansas, and Oklahoma and depicts some of the conservation methods that are being used on demonstration projects in this area. Photographs illustrating practicable methods of control are included.

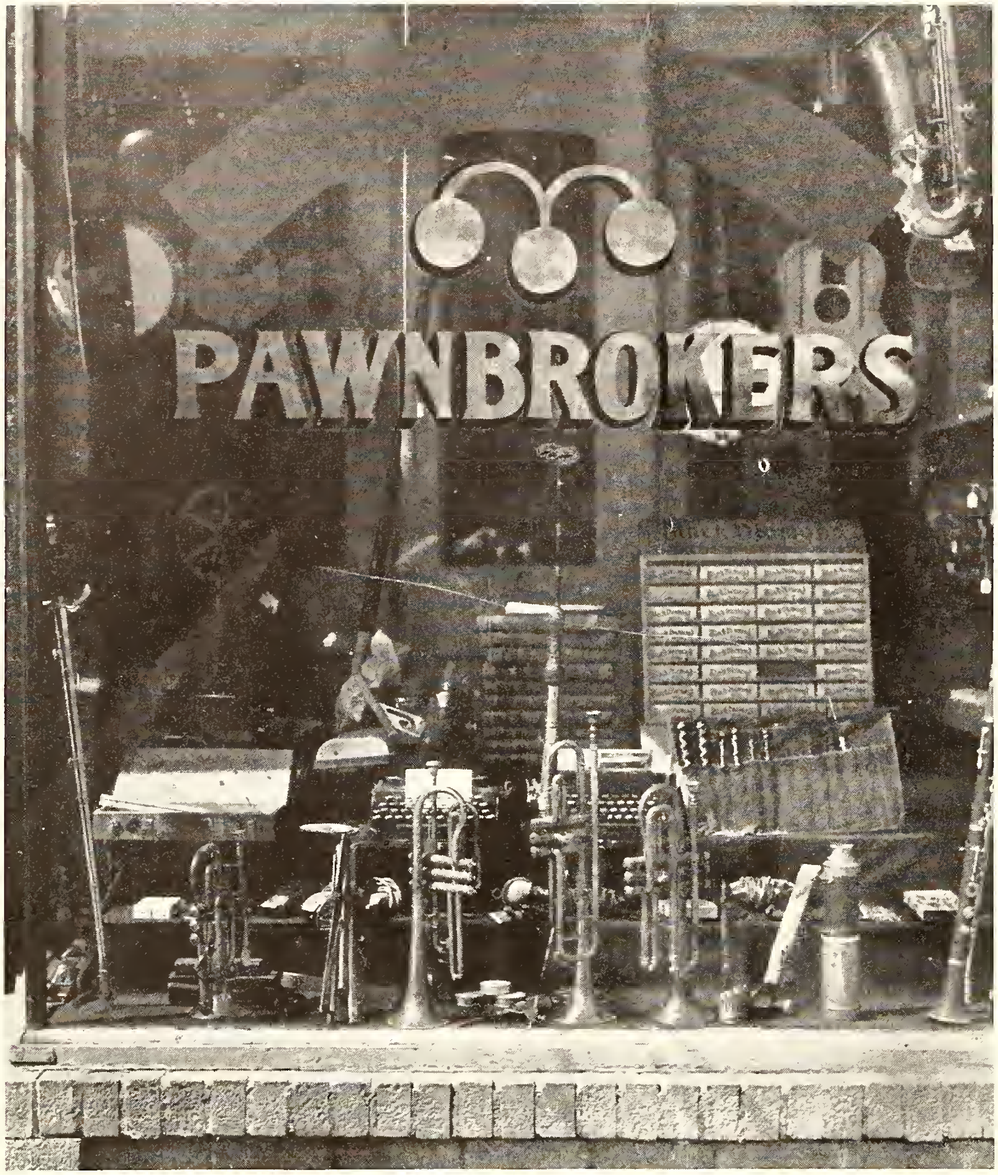
STUDIES ON TRICHINOSIS—THE PAST AND PRESENT STATUS OF TRICHINOSIS IN THE UNITED STATES, AND THE INDICATED CONTROL MEASURES, by Maurice C. Hall, U. S. Public Health Service. Reprint No. 1975 from the Public Health Reports, Vol. 53, No. 33, August 19, 1938, pp. 1–14. Address: Superintendent of Documents, Washington, D. C. 5 cents. Trichinosis is a disease caused by the entrance into the body of a parasitic worm, trichina, generally through the eating of under-cooked pork. A summary of necropsy studies in several cities is presented, showing an incidence of trichinae in 3.5 percent to 27.6 percent of the cases. Considers ineffectiveness of present control measures and suggests methods of organizing an adequate control program. References.

GRADING DRESSED TURKEYS, by Thomas W. Heitz, U. S. Bureau of Agricultural Economics. Farmers' Bulletin No. 1815. 1938, pp. 36, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents. Describes Government standards for grades of dressed turkeys. Includes information on weight specifications, labels, certificates, and grading procedures. While this bulletin is intended primarily for producers, it will be of interest to consumers desiring a better understanding of Government grades.

HOME-MADE JELLIES, JAMS, AND PRESERVES, by Mabel C. Stienbarger and Fanny W. Yeatman, Bureau of Home Economics, U. S. Department of Agriculture, Farmers' Bulletin 1800. 1938, pp. 18. Address: Superintendent of Documents, Washington, D. C. 5¢. Gives information on preparing the fruit and containers, sealing and storing, jelly failure and spoilage, and recipes.

DRY SKIM MILK. 1938, pp. 8. Address: Office of Information, U. S. Department of Agriculture, Washington, D. C. Free. Discusses the food value, storage, and uses of dry skim milk. Contains recipes featuring its use in soups, cereals, desserts, and other dishes.

SOYBEANS FOR THE TABLE, by Elizabeth F. Whiteman and Ellen K. Keyt, Bureau of Home Economics, U. S. Department of Agriculture Leaflet No. 166. 1938, pp. 6. Address: Superintendent of Documents, Washington, D. C. 5 cents. Considers the food value of soybeans and methods of preparation both as a dry and green vegetable.



RATES charged in the pawnshop business are fairly high because most loans are small and many are for short periods; appraisal is a difficult art, and storage of pledges expensive; theft is always a hazard; and because many pawnbrokers have to go to banks themselves to get the money they lend consumers.

At the Sign of the Three Balls

Here are some facts about an ancient source of loans and some questions cautious consumers should ask before raising quick cash at pawnshops

"BAROMETERS of misery" is what they used to call the figures on pawnbrokers' loans. Probably that characterization was never quite accurate. Depressions and panics do send people around to pawnbrokers who have never been there before, and for loans smaller than the average in better years. But pocketbook depression is always with some groups; and there have always been others beside the jobless worker among the customers of the Medicis' descendants.

It is the poor of the cities, nevertheless, who are the most frequent borrowers, if not the most profitable to pawnbrokers. And it is they who are most in need of the law's protection.

Regulation of the pawnbroking business is rather a twilight zone of public protection. A few States have enacted legislation limiting the interest on pawnbrokers' loans and seeking to maintain ethical business practices in the interest of consumers and of honest dealers. Most States, however, have hardly made a beginning in this direction, beyond exempting pawnbrokers from low interest requirements of the usury laws.

Interest rates on pawnbrokers' loans vary enormously from place to place, and from State to State. In New York City, for example, it is possible to borrow at pawnshops for as little as 2 percent a month. Top interest rate permitted by the New York State law is 3 percent a month for the first 6 months on a loan of less than $100; and 2 percent beginning with the seventh month. This comes to a total rate of 30 percent a year. On loans of $100 or over, the top interest is 2 percent a month for the first 6 months; then 1 percent after that—a total of 18 percent a year.

Legal rates elsewhere vary from the 10 percent a year maximum in Nebraska, to New Mexico's 10 percent a month. In most States, it is simply what the traffic will bear; and there is little or no attempt at regulation.

Cities do a certain amount of regulation, usually as part of their police work. The pawnbroker is a possible market for stolen goods, so police officers keep in fairly close touch with him. New York City requires each pawnbroker to submit a written description of every pledge within 24 hours after it has been left with him.

Few pawnbrokers are in cahoots with criminals. It requires a sort of sixth sense, however, for the pawnbroker to avoid accepting stolen gems or merchandise. The business itself usually develops in its practitioners this intuition—for if they slip, they lose both interest and stolen pledge. Intuition is usually supplemented by legal talent—lawyers' fees figure significantly among pawnbrokers' expenses.

THE PAWNBROKER MAKES LOANS to people who can seldom get money anywhere else. Each consumer credit agency specializes to a large degree in certain types of customers and certain types of security. Rates, of course, reflect the hazards of the business, as well as the lender's cost of obtaining money to operate with, and the overhead of doing business.

When we come to pawnbrokers, we come to loans which do not depend for repayment on the ability of the borrower's friends to make good if he defaults, or on foreclosure of a mortgage, or filing of a wage assignment. The pledge alone is security. Any-

---

**Previous articles in this series on consumer credit have appeared in the Jan. 30, Feb. 13, Feb. 27, Mar. 13, and Mar. 27, 1939, issues of CONSUMERS' GUIDE.*

one who can dig up some jewels or silverware, a watch, or perhaps a camera, can get a loan without regard to what his income is or will be. To a man out of a job, a pawnshop may be the only place to go for cash.

A loan is quickly made. And, if the borrower wishes, that is where the transaction ends. He leaves his pledge behind; but he incurs no other obligations.

No fines can be charged for delinquency in making payments. The borrower signs no note, and no law suit can be brought for non-payment. The borrower will not have any goods repossessed or his salary attached. No collectors will pursue him if he fails to repay his loan. Loss of the pledge may be a heavy penalty, but it is the only penalty.

The pawnbroker cannot collect a deficiency judgment if he has to sell an unredeemed pledge for less than he loaned. On the other hand, if the sale should bring more than the loan, in theory the customer may collect the surplus. But since the pawnbroker usually bids in this defaulted pledge himself, there is seldom any surplus to collect.

In a sense, the customer is selling an article, while keeping the right to buy it back later on, within a specified period, for a somewhat higher price.

Pawnbrokers still fill a genuine economic need, though they have in recent decades become less prominent in the American consumer credit picture. They still make about 150 or 160 million dollars' worth of loans a year. Since so much of this business is in very small loans, they are lending to millions of needy consumers each year.

INEQUALITY of bargaining power which prevails in most fields of consumer credit is clear when the consumer comes to the pawnbroker. But problems of regulation in the public interest are not so acute since the lender has no power over the consumer, unless he wishes to redeem his pledge.

Loans may be as small as a dollar; as large as several thousand dollars. It is on the larger loans that the pawnbroker makes most. But, except in the shops that lend only on jewelry, the average loan is probably less than $10.

ALMOST ANYTHING may be—and has been—pawned. Jewelry and silverware and watches are the most obvious, and usually the best, pledges. Musical instruments enough to launch a symphony orchestra may be found stored in many a hockshop. Paintings, fabrics, lace and embroideries compete in many establishments with cameras and luggage, guns and pistols, lawbooks and the tools of many trades, for the eye of the consumer who comes to borrow or to buy.

The Paris municipal pawnshop had in storage a human skeleton pawned by a medical student. That establishment, incidentally, built a 2,000-car garage recently, and knowing Parisians claim that the cheapest way to store a car for the winter is to hock it with "my aunt" and redeem it in the spring.

"Rags" are the pawnbroker's term for something not kept in the safe. A mechanic out of work leaves his tools for a few dollars. A newspaper cameraman who has parted too speedily with his pay check may bring his camera into "Uncle's" place; he plans to pick it up again in a few days. A musician says the same for his violin.

Many of these pawns have value only for the person who brings them in; little for the dealer. Sometimes the dealer knows his customers well, and he is sure the man will redeem the Sunday suit he pledges, or the laundress her iron. It is a sad day for this type of borrowing consumer when he cannot redeem his pledge, and hardly profitable for the pawnbroker.

Many shops specialize in one item—jewelry most frequently. Some of the biggest concentrate on diamonds.

Danger of such specialization to the pawnbroker is the threat of a drop in the market. The sagging of the diamond market in the early '30's hit many pawnbrokers hard. And from faraway Shanghai, where pawnshops have been serving the needy Chinese family for 3,000 years, recently came a sad plaint. The Shanghai pawnbrokers' guild asked that the period allowed for redemption of pledges be reduced from 18 months to a year. Gowns are commonly left in hock; and it seems that, with the coming of notions of style obsolescence, they were losing all value in the course of 18 months' changes in fashion.

PAWNBROKERS

A FEW BITS OF ADVICE are in order for consumers who may be seeking to raise some cash in a hurry at the sign of the three balls.

"Do I need the loan more than the pledge?" is obviously the first question for the consumer to ask himself. It is not only a matter of giving up the use of the pledged article at the moment, but plans for later redeeming the pledge are likely to be upset.

Is there a reasonably long period allowed for redemption of the pledge? A year's time is a fair period.

HOW DO INTEREST RATES at pawnshops compare with those of other loan agencies in the community? This question may be cruelly academic to those who cannot furnish the security for another type of loan. For others it is a practical consideration.

"Please read your ticket carefully" says the sign in some establishments. It is as sound advice as "read the label" and "watch the scale" in a grocery store or meat market.

Even in the States which have fairly adequate regulations, a certain amount of gypping on rates is possible if the pawnbroker is one of the unscrupulous minority, and the consumer is not aware of his rights. Interest may be deducted in advance contrary to the law's provisions. Or a charge may be exacted "for extra care."

If there is only a slight chance of being able to redeem the pledge, the customer may do better at a second-hand store, selling the article outright. True, many establishments are half pawnshops, half second-hand stores. But comparing offers is one form of sensible shopping around. Another is to see whether your town has not only pawnbrokers, but a remedial loan society which lends on pledges. If so, try it.

REMEDIAL LOAN SOCIETIES are the nearest approach in this country to the public pawnshops which supply reasonable credit in many European countries. They are limited dividend companies, who lend chiefly on pledges. Borrowing from remedial loan offices will be discussed in the next issue of the *Guide*.

COOPERATION

A NUMBER of bulletins of the Bureau of Labor Statistics of the U. S. Department of Labor have come to be handbooks for the consumer cooperative movement—notably, those on the organization of cooperative store associations, gas and oil co-ops, and cooperative housing associations. Cooperators frequently refer to these just by number—Bulletin 598, 606, 608, one may hear co-op leaders saying. Now comes Bulletin 659, to take its place along with the others. Not a handbook of organization this, but the most complete survey, the best impartial examination, of the state of consumer cooperation in these United States.

"Consumers' Cooperation in the United States, 1936" is the title of this 200-page bulletin. It is available from the Superintendent of Documents, Washington, D. C., for 25 cents.

Most of the gathering of facts and figures for Bulletin 659 was done during 1937; the cooperative movement is described as of the year 1936. Much more comprehensive than any of the 4 previous BLS enumerations of consumer co-ops, the 1936 survey still falls a bit short of a complete census. But "its coverage is so extensive as to justify estimates being made for the extent of the movement as a whole."

Partial findings of the survey have already been reported on by the *Consumers' Guide* ("Cooperative Structure," Vol. V, No. 3, May 9, 1938; and "Taking Stock of Consumers in Business," Vol. V, No. 6, July 1938). But cooperators and students of consumer organization will need to have Bulletin 659 on their bookshelves.

Headline statistic of the report is this: In 1936 retail stores, gas stations and service associations, "which constitute the heart of the movement," totaled about 4,100, with over 830,000 members in the entire country. In sum, these consumer cooperatives were Big Business; they "were doing a business of some $188,000,000 a year."

The Bulletin's 10 sections, however, do more than merely range statistics. A "General Review of the Movement in 1936" leads off the discussion. Trends of development in the United States, especially during the depression years, are considered.

Another chapter takes the reader through the various forms of retail distribution to which the cooperative method has been applied by organized consumers in cities and on the farms. Figures on sales and costs, on net earnings and patronage refunds to cooperators are included along with discussions of "cooperatives in relation to population," and "farmers in the Consumers' cooperative movement." There follow chapters on local service associations (laundry establishments, medical cooperatives, housing associations, etc.); telephone associations; credit unions; and insurance associations. One chapter is devoted to the federations, describing their services, trading territory, membership and resources, cooperative practices, and the development of individual associations.

"Education and Recreation in the Cooperative Movement" gets a brief chapter.

"Cooperative Associations as Employers" examines, in the light of all the available data, the record of employment of personnel policies, of hours worked by employees, and earnings of workers the year round as well as in terms of hourly pay. It compares the wages in co-ops and in comparable private trade. Finally, it discusses the extent of collective bargaining in the cooperative movement.

A final chapter takes up the legal status of cooperatives. Extensive attention has recently been focused on the legal position of consumer co-ops. This chapter, written by an attorney on the staff of the Consumers' Counsel Division of the AAA, and taking the story through the end of 1938, is therefore timely.

Cooperative medical care associations are studied. The application of insurance laws is considered, and the issue of "the corporate practice of medicine," brought practically up to date. Public regulation of electricity co-ops and telephone associations is discussed.

NORTH DAKOTA has organized a Division of Cooperatives as part of the State Department of Agriculture and Labor. Purpose of the division is to "serve as a source of cooperation and information in the establishment and/or maintenance of cooperatives generally." To North Dakota goes the honor of being the first State in the Union to set up such a division to aid co-ops. The division will compile statistical data relating to work and progress of co-op enterprises for use of cooperatives which are already serving North Dakota people, or in process of being organized.

FARM CREDIT ADMINISTRATION has issued a bulletin on the 15,000 farmer-owned and farmer-controlled cooperatives including marketing co-ops and purchasing associations ("A Statistical Handbook of Farmers' Cooperatives," Farm Credit Administration Bulletin No. 26; for sale by the Superintendent of Documents, Washington, D. C., price 35 cents). The bulletin gives a complete statistical picture of the associations, with descriptions of their legal aspects, history, financial organization, membership, volume of business, and so on. Data were obtained by a "door-to-door" canvass of the co-ops. Largely, a compilation of tables, the bulletin is a ready reference book for anyone interested in farm marketing and purchasing associations, mutual irrigation companies, and mutual fire insurance companies.

The 2,600 purchasing co-ops covered in the study tripled their business in the 1927–37 ten-year period, reaching a high of $350,000,000 in 1937–38. Membership more than doubled in the same period to a total of 900,000.

ALSO for the cooperator's bookshelf is the bulletin by the Farm Credit Administration, called "Farmer Co-ops in Virginia." It is free from the Baltimore Bank for Cooperatives, Baltimore, Maryland. This bulletin is a close-up picture of marketing and purchasing co-ops in the State. There were 129 cooperatives in operation in 1936, the year of the study. The types of co-ops range from fire insurance mutuals to associations marketing fruits and vegetables, tobacco, dairy products, and livestock.

THE COOPERATIVE LEAGUE OF THE U. S. A. announces its annual tour of "Cooperative Europe, a traveling inquiry into Consumers' Cooperation." Leaving New York July 1, the tourists visit Finland and the Scandinavian countries, cross the North Sea to Scotland and England; go across the channel to France, and return on September 3.

Also announced by the Cooperative League for its summer itineraries is the third annual conference-tour of Nova Scotia, from August 21 to September 2.

EXPERIMENT Station scientists have been in the forefront of the vitamin researchers. Tracking down the best sources of the essential vitamins is only part of their job. Important, too, is developing methods that will retain vitamins.

Science Lends a Hand to Consumers

From the laboratories and test tubes of Agricultural Experiment Stations come tips on new uses for agricultural products and new ways of guarding against loss of vitamins in preparing foods

WHEN Johnny Jones marches up to the counter of the local hot dog stand this summer and asks for a "honey milk drink, please," he won't be manufacturing a case for the Federal Trade Commission. Because chances are the ads that Johnny reads will be true to the letter; the drink he buys will have both honey and milk in it.

If Johnny doesn't like his milk "straight" and hasn't a yen for honey, his cause still will not be a lost one. Milk dispensers up to the minute on new concoctions in the industry will be able to furnish him with chocolate fudge milk, or any number of fruit juice milk drinks—raspberry, grape, blackberry, pineapple, or cherry.

For these new styles in milk drinks Johnny will have the Illinois Agricultural Experiment Station to thank. Out of its laboratories have emerged the discoveries that will bring new flavors and health value to a glass of milk.

Research like this is all in the day's work for the experiment stations.

Blazing new trails for consumers and farmers alike, scientists, university professors, and specialists put their knowledge at the disposal of the experiment stations. Over 4,000 trained workers—many of them outstanding in their fields—contribute in one way or another to research financed by joint contributions from State and Federal funds. Every year the Department of Agriculture in Washington gathers together the results of the previous 12 months' research and summarizes it for use of housewife, farmer, or scientist. Here we pick up the highlights of the stations' 1938 program.

Discovering new uses for agricultural products boosts the farmer's income; it may also bring variety to the kitchen pantry. The Illinois Station, for example, didn't stop when it discovered fruit juices and milk made a winning combination. If it works with milk, then why not with milk products, they asked. And out of their experiments came fruit-flavored creams and cheese spreads.

The Oregon Station has been doing the same type of research on prunes. It has lined up a few new products from prune pulp and juice.

Even in the far-off station at the University of Puerto Rico, scientists are losing no time in processing native fruits for the market in the States. Mangoes may soon be coming to the mainland in the form of slices and juice nectars. Before long American dinner menus may start off with canned nectar from the red-fleshed papaya, or wind up with a serving of the fruit itself.

Add to these new discoveries the continued work done by the New York Station on rhubarb, cherry, peach, and various berry juices, and you have a picture of the grocery shelf of tomorrow.

BRINGING VARIETY to the family diet is one thing; bringing nutritional balance to it is quite another. A major part of the work of the experiment stations revolves around this problem.

A few months ago the headlines were telling of a shipment of nicotinic acid from this country to check the spread of pellagra over war-torn Spain. Nicotinic acid, the news accounts said, was the new sure-fire cure for pellagra—caused by a lack of foods rich in the anti-pellagra vitamin. The Wisconsin Experiment Station laboratory led the way in discovery of this great new weapon against starvation. Liver, kidney, brain, and heart are all rich in nicotinic acid, the Station found, and are high in nourishment as well as low in cost.

Tomatoes have had the experts arguing almost since vitamin science began. Massachusetts Station experts have discovered that it does not matter whether tomatoes are canned in glass or tin. Canned either way, they lose little Vitamin C when stored at room temperature in reduced light.

Florida Station scientists looked into the problem of home-canned tomatoes and tomato juice versus commercial brands. Properly processed home-canned tomatoes and tomato juice, they concluded, contained as much Vitamin C as any of 5 different commercial brands that were tested.

New York Station experts advise filling jars and cans to the very top when home-canning tomato juice. Loss of the precious vitamin is considerable if any air space is left at the top of the container.

Researchers at both the Massachusetts and New York Stations, looking into vitamin values of fresh green lima beans, found they compared favorably with orange juice, one of the richest Vitamin C sources. The beans keep the vitamin only if left in the pod after picking, losing it rapidly when shelled. Vitamin-wise housewives buy their limas in the shell, shelling them just before cooking. Keep the unshelled beans in the refrigerator if you do not use them immediately.

COMMERCIALLY FROZEN FOODS are appearing in increasing quantities in grocery stores. Many rural communities are adopting the storage locker plant as a means of keeping meats and other foods fresh until ready for the table. As important as freezing the foods is knowing how to prepare them.

If you are going to freeze fruits and vegetables, select those that are mature and fresh. Keep them in a cellar, ice house, or some other cool place if you cannot freeze them immediately after harvest, advises the New York Station. In freezing fruit, it is wise to pack it in sugar in small containers and place it in cold storage at 0 degrees Fahrenheit, or below zero with a free circulation of air.

Problems in preparing frozen vegetables for use on the table have been solved in part. Oregon workers recommend that frozen-pack peas be cooked in the top part of a double boiler for best retention of their Vitamin C content. Disregarding the nutritive quality for the moment, a panel of judges at the Washington Station voted that frozen-pack peas tasted best when cooked by steaming, rather than in water or in a pressure cooker.

On the other side of the country, workers at the Massachusetts Station favored steaming for frozen-pack spinach. Steamed, the spinach retained twice as much of its Vitamin C as boiled.

CUT OR SHREDDED CABBAGE, the New York Station reported, loses most of its Vitamin C when cooked in the usual way: boiling in water and then draining off the water. Steaming it is better, and "panning it" results in the greatest saving of the vitamin.

Speaking of cabbage, housewives can look forward to the lifting of one worry. A cabbage that is practically odorless when cooking has been developed by the New York Station. Called "Cornell Early Savoy," it is described as "exceptionally fine for cooking."

Meat preparation is always a favorite subject of study. It is well and good to buy your meats by government grades, but even the best quality cut will suffer on the stove or in the oven if it isn't cooked properly.

Missouri Station experts broiled 2 beef steaks at constant temperatures of 175 degrees Centigrade and 225 degrees Centigrade to an internal temperature of 58 degrees. The one broiled at the higher temperature showed greater cooking loss, required less time but more fuel to cook, and had a greater loss in weight after removal from the oven. It gave a smaller percentage of edible material than the steak broiled at the lower temperature. The steak cooked at the lower temperature was also generally rated higher in palatability "with the exception of flavor and tenderness of the large muscle." If you want your steak rare or medium, don't broil it at the higher temperature; the test showed it will continue to "cook" for a longer period when it is removed from the oven.

AS IMPORTANT to the housewife as the research on food and food preparation is the work done by the stations on household equipment. What vacuum cleaner purchaser, for example, has not wondered what the difference is between a cleaner with a motor-driven brush plus suction, and a cleaner using only suction to clean? The Washington Station decided to find out the difference scientifically. Using 9 different cleaners on Axminister, Wilton, and velvet rugs, it found that cleaners using suction with a motor-driven brush removed a third more dirt in a given time than straight suction cleaners. Wear on the rugs was found to be almost negligible with all the cleaners.

The more expensive machines were found to be faster for doing a good cleaning job but were no more durable on the average. No matter what your choice, advise these experts, be sure the inside of the bag is kept clean.

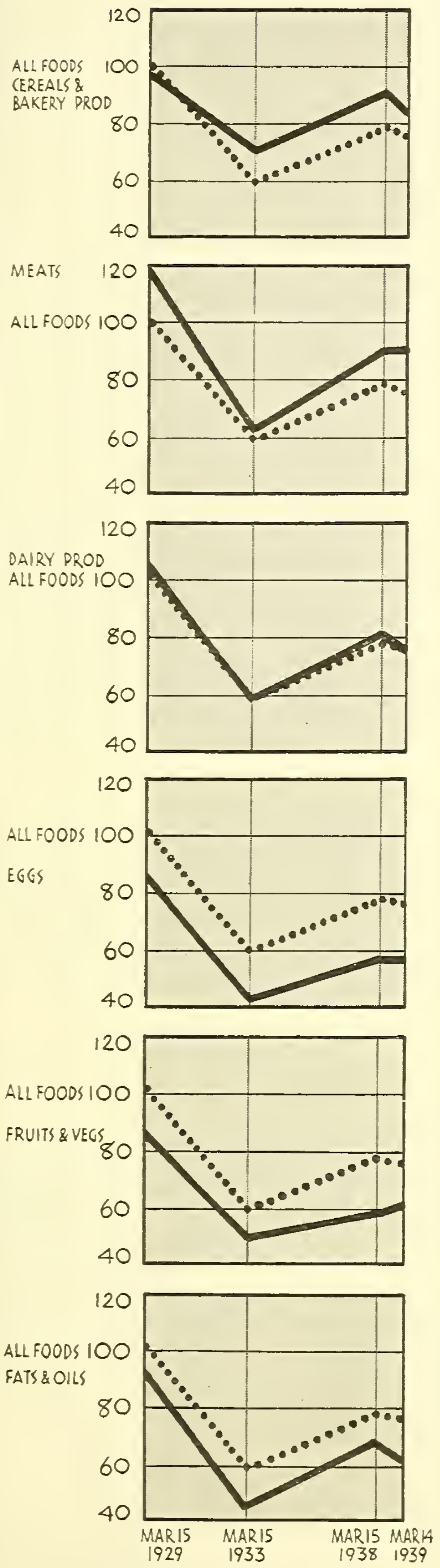
Pressure cookers came under the spotlight of the Nebraska Station. They tested 40 pressure gages and found 29 of them were inaccurate under a pressure of only 5 pounds. They recommend that the gage be checked before purchasing the cooker, and rechecked at the beginning of each season.

The cooker with the cover clamped on by a band with one bolt is easiest to seal. In buying a pressure cooker, they advise, check these points: size and shape of the cooker, material from which it is made, method of sealing and clamping, type of pressure gage, safety valve, petcock, and thermometer, if there is one fitted into the cover.

Vitamins, household equipment, food preparation, standards of living, new uses for agricultural products—all find a place in the laboratories of the agricultural experiment stations.

READERS who wish to know more about these research projects can address requests to the Office of Experiment Stations, U. S. Department of Agriculture, Washington, D. C.

A PERSPECTIVE



RETAIL FOOD COSTS declined slightly again from February to March, and remained below every other month since December 1934. Compared with last March costs are about 3 percent lower. Meats and fresh vegetables are the only food groups retailing above their March 1938 level. Other food groups are at the lowest point for March since 1933 or 1934.

FOOD SUPPLIES in general during May probably will be larger than a year ago. Increases over last May are in prospect for strawberries, oranges, grapefruit, pork, better grade beef, butter, eggs, poultry, green peas, and cereal products. Decreases are expected in potatoes, Bermuda onions, celery, string beans, spinach, new cabbage, apples, lamb, and lower grade beef.

STRAWBERRIES. May marketings are expected to be considerably above their April level.

MEATS. Seasonal upswing in supplies of better grade beef, spring lamb, and pork is expected in May. Smaller than usual proportion of the spring lamb crop probably will be marketed prior to July 1.

EGGS. Downward trend in monthly supplies is in prospect for the remainder of 1939.

POULTRY. Broiler marketings generally increase seasonally from April to July when supplies hit their seasonal peak.

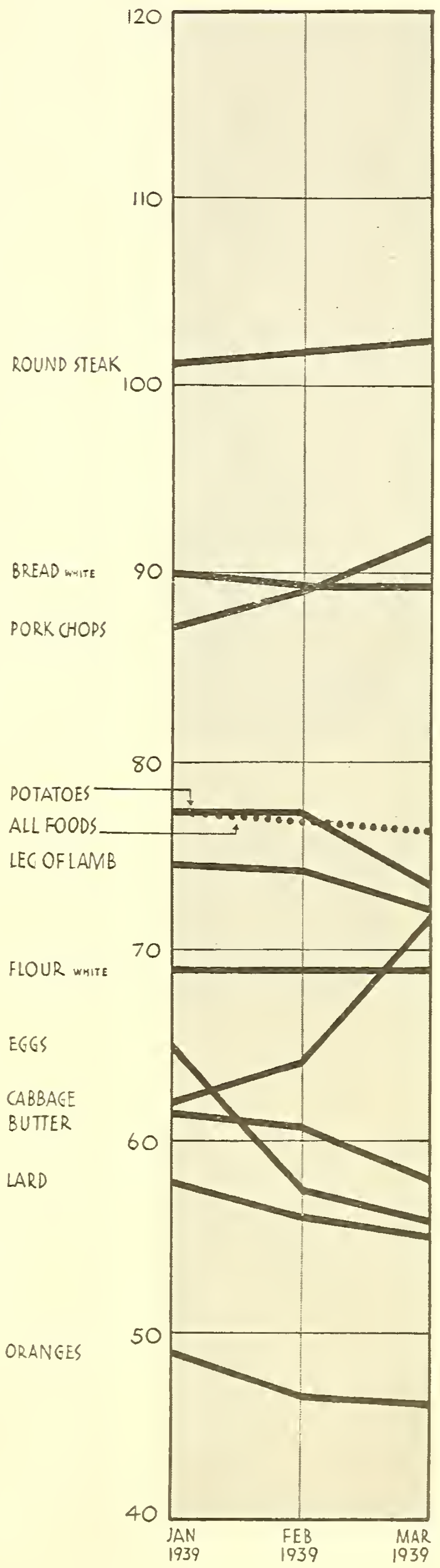
BUTTER. Another monthly seasonal production increase is expected in May. Heaviest production ordinarily comes in June.

MELONS. First watermelons and cantaloupes of the season are expected early in May. Melon season generally ends in September with heaviest shipments in July and August.

POTATOES. New potato supplies which comprise the bulk of potato marketings after April are expected to be larger during May than in April.

VEGETABLES. Marketings in May generally are larger than in April, and this upswing in monthly supplies ordinarily continues through the summer months.

A CLOSE-UP



IN THIS ISSUE

APRIL 15, 1939 • VOLUME VI, NUMBER 1

An Experiment in Better Nutrition . 3
Finishing Your Floors 6
Consumers' Bookshelf 9
At the Sign of the Three Balls . . 10
Cooperation 12
Science Lends a Hand to Consumers 13
Your Food Supplies and Costs . . 15

U. S. GOVERNMENT PRINTING OFFICE 142225

5

LIBRARY
RECEIVED
★ JAN 8 - 1945 ★
U.S. DEPARTMENT OF AGRICULTURE

SEWING PROJECTS

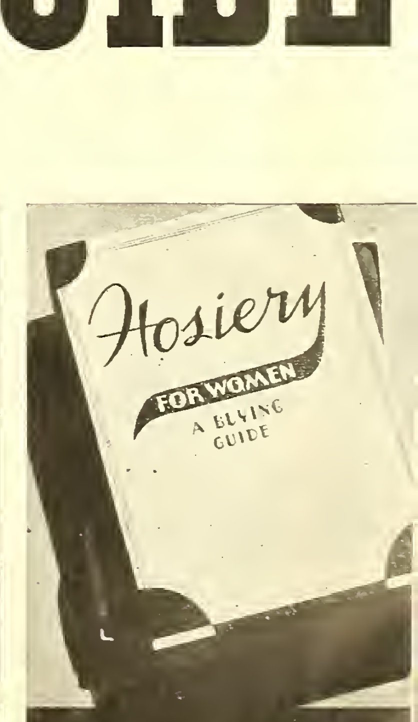
CONSUMERS' GUIDE

IAY 1, 1939

VITAMINS

TRADE BARRIERS

STANDARD SIZES



BOOKSHELF

CONSUMERS' GUIDE

MAY 1, 1939 VOLUME VI, NUMBER 2

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

WHEN two consumers talk over their common consumer problems a little bit of history is made. When 50 do it, that makes a whole chapter in history. When 600 gather from all over the country to swap ideas on what's wrong and what's to be done about it, that's practically building a monumental milestone.

Two events of special interest to consumers took place last month; one, a series of consultations with the Secretary of Agriculture in Washington; the other a gathering at the Institute for Consumer Education at Stephens College, Columbia, Mo. Both made history.

To Washington came 50 women, invited by the Secretary of Agriculture to consult with the Secretary about consumer problems related to the administration of the agricultural adjustment program and how that program may help to assure abundance for consumers. Half of the 50 women live on farms or are intimately acquainted with the problems of farm families; half came from cities or are working with groups of city families. They met with the Secretary and his officials. They asked and answered questions on problems troubling both city and rural consumers on farm products. The talk was lively, cogent, challenging. They defined and redefined the problems and possible solutions. So stimulating was the discussion, that *Consumers' Guide* is going to report it further in a later issue.

Men and women—600 strong—gathered at the Columbia, Mo., conference on consumer education. They came from 31 States. They were teachers and directors of education, top-flight business executives, representatives of magazines and publishing houses, executives of great organizations of women, of consumer organizations, cooperators, home economists, government specialists, and directors of great educational foundations. Never before had there been such a gathering of the clan of people who are deeply concerned with the kind of thinking which people, young and old, are doing today about the Nation's greatest problem—how to get an abundant living for everyone—and still keep a maximum amount of economic freedom for everyone.

From studying traditional masters of economic thought, such as Adam Smith, to studying tin cans is a far leap. Students and leaders in consumer education have made that leap. From thinking in terms of "my slice" in the national income pie, to thinking in terms of a larger national income pie, is a far leap. These students and leaders in consumer education have made that leap. From looking upon government as an instrument to protect "my interests," to looking upon government to promote "our interests," is another far leap. These students and leaders of consumer education have made that leap.

Three days the conference proceeded. It probed into this question and that. What kind of information do consumers want in advertising, on labels, from sales clerks? What kind of information do consumers want from books, from teachers, from government? What kind of information do consumers want in order to get the most for their money, in order to budget wisely, in order to encourage producers and distributors who are making greater abundance possible? What kind of information do consumers want so that they can distinguish between those producers and distributors who are serving limited interests and those who are serving the broader interests of all consumers? Questions galore were tossed up. Few answers came, because answers to such questions as these are difficult.

From the great women's organizations came the plea that special interests in our Nation clearly identify themselves to consumers. From business came the plea that consumers be forthright in expressing the things they want from industry and trade and collaborate with business in attaining these necessities. From teachers came the plea that less commercial, and more disinterested, study materials be made available to the schools. From others came the plea that the need of low-income consumers for educational materials directed to their special problems be considered. From researchers in consumer products came the plea for better integration of this work.

From all sides these conferees expressed their conviction that consumer action must go along side by side with consumer education. One business executive contributed the suggestion that only as consumers organize into a pressure group can they secure what they want. The director of an important settlement house in New York described a joint campaign of farmers and consumers for more milk consumption which was climaxed by a dramatic march on a State government office in which hundreds of mothers from the slum areas of the city arrived with their babies in gocarts, and farmers—leading a cow—joined them in asking the government for action on their petition. Others warned students and teachers against becoming textbound, and urged that the teaching of consumer education should start in the market place and with the practical day-to-day problem of making dollars buy their most.

Consumers who would like to have copies of the speeches made at this conference should address their requests to the Institute of Consumer Education, Stephens College, Columbia, Mo.

A NATIONAL SURVEY of consumer education is being conducted by the Consumers' Counsel Division in cooperation with the U. S. Office of Education. This survey will cover four main areas of consumer education activities: (*a*) Elementary schools; (*b*) secondary schools; (*c*) colleges and universities; (*d*) adult groups. Some attention will also be given to consumer education carried on in the home. In the elementary school division an analysis will be made of the number of elementary school courses of study. Information on consumer education in secondary schools and in colleges and universities is being gathered by means of questionnaires.

Teachers of consumer education classes who have not already sent information about their work to the Consumers' Counsel Division are invited to contribute data regarding their consumer education courses. The Division also desires to receive copies of course outlines and pamphlet publications developed for use in consumer education classes. Mail in your material to the Consumers' Counsel Division, AAA, Washington, D. C.

●

> "Man needs both bread and freedom; it is a calamity when he must barter one for the other, and the result may be the breakdown of civilization."
>
> HENRY A. WALLACE,
> *Secretary of Agriculture.*

●

TO WPA go our thanks for photographs which they have generously furnished us for the main illustration on this cover and for our articles on "Haberdashers to the Needy," and "Vitamin Fancies and Facts."

Haberdashers to the Needy

*WPA sewing projects provide another kind of triple-action relief—clothes for the needy, jobs for the unemployed, and outlets for farm surpluses**

TAILORS and haberdashers in countries where there are kings sometimes get the right to designate themselves "Tailors and haberdashers to H. M. the King."

If monarchic precedents held in democratic countries, WPA might be styling itself "Tailors, haberdashers and dressmakers to the needy." Certainly it has few to challenge its right to such distinction. On achievement in numbers of men, women and children clothed, of garments made and reworked, on employment given to unskilled but needy workers—on all these counts, sewing projects of WPA have rung up many claims to that title.

They have done more. Producers of fibers, unable to find markets that will pay a decent price for all they raise, have found this great enterprise in relief an outlet for some of their wares. Like school lunch programs which help food producers, these sewing projects have brought triple-action benefits to farmers, workers, and consumers.

Just as the school lunch program nourishes children with foods purchased from surplus-harassed farmers, the sewing projects clothe the unemployed with surplus cotton purchased from cotton producers. Besides the direct purchases of cotton fabrics on the open market (which give a boost to business and farmers), the sewing projects got more than 6½ million pounds of raw cotton from the Federal Surplus Commodities Corporation in 1938. This cotton was made into household articles on the sewing projects. All of this was paid for under a provision which allots 30 percent of the Federal tariff receipts to the Federal Surplus Commodities Corporation so it can "encourage the domestic consumption of farm products."

The Agricultural Adjustment Administration also had a hand in clothing consumers with the aid of the sewing projects and the FSCC. In 1938 it contributed 32 thousand cattle hides, left over from the drought relief program in 1934, which were made up chiefly into sturdy useful leather coats.

WPA BEGAN with millions of men, women, and children who were almost, if not literally, naked, and clothed them. Children have been supplied dresses and suits so they can go to schools. Men have been outfitted so they could look for jobs and go to work when they found jobs. Women have been clothed so they could emerge from their homes and participate in the life of their neighborhoods. Big brothers and sisters have been outfitted so they could go to work or to school. Newly born infants found WPA layettes awaiting them.

Up to October 1, 1937, the date the last complete inventory of WPA was made, the WPA sewing projects had made 122 million articles for free distribution by public agencies to the destitute or to the handicapped in tax-supported institutions.

Men urgently in need of clothing received 17 million garments; 25 million garments were distributed to needy women; 16 million garments went to boys; 21 million articles of apparel went to girls; and 16 million baby garments were made for beginners. Besides these garments, sewing projects made hospital supplies, sheets, pillowcases, towels, surgical dressings, blankets, comforts. Even toys have been fashioned from sewing scraps to beguile the children of impoverished families.

** For the story of Government aid for the ill-fed, see "One Square Meal a Day" in January 30, 1939, issue of Consumers' Guide, and "An Experiment in Better Nutrition" in April 15, 1939, issue.*

Figures that mount to the millions sound staggering to people who buy one coat every seven years, 2 or 3 layettes in a lifetime. Spread out over all the ill-clothed who have no money to buy they shrink to little.

The clothing made on WPA sewing projects has never approached the needs of families on relief. WPA has never made enough clothing to supply adequately just those families on relief that had no way of obtaining any clothing at all. Despite the 95 million garments produced, there are still families, men, women and children, who need clothes, but have no way to buy them, who can't get them.

This isn't the fault of the WPA, nor the fault of any one person. WPA was designed to give work to the unemployed. It was strictly enjoined to undertake no project which would compete with private industry or replace a regular activity of government. Whatever has been done on WPA had to be done with labor available on WPA rolls. By and large the work has had to be carried on in whatever vacant room the cities and States designated for WPA. Whatever has been made has been made with the materials that cities and States supplied.

That is the framework of the WPA and the WPA sewing projects. Within this framework approximately 180 thousand women, the unemployed wage earners in 180 thousand families, have been put to work in almost every county of the United States making clothing and other household articles for families on relief and for public institutions. Inside these rigidly determined limits the WPA has sought to meet as best it could the most urgent clothing needs of 10 or 12 million unemployed.

Manufacturing clothing is a skilled vocation. In this day of clothing factories not every woman knows how to sew. Of the women who can sew in an emergency at home, there are few who can actually make a garment. Hardly any untrained woman is able to perform the highly trained, highly skilled job of cutting clothes.

FIRST OF ALL, WPA sewing projects have taken untrained, unskilled women and taught them the craft of clothes making. Some women have even learned the very technical skill of cutting clothes.

Sitting in a house with a sewing basket in your lap is very different from operating in a room with 3 or 4 hundred other women and turning out clothes at factory pace. It takes factory organization to produce large quantities of clothes.

Clothing "factories," then, have been organized. Sometimes these are set up in an abandoned church, or in the basement of a school or an empty room in the city hall. Machines have been assembled from whatever source the city or State could find. Cutters have been trained—trained so well, in fact, that some of them graduated from the WPA to jobs in clothing factories. Machine operators have been trained, and again many of the women trained on WPA sewing projects have found jobs in the clothing industry.

Clothes, they say, make the man, the woman, or the child. Realizing that badly made clothes that stamp their wearers as welfare recipients would not build the morale of people already hard put keeping up their spirits, WPA sewing projects have placed particular emphasis on making good clothes from attractive patterns. They have been especially careful that all the children in relief families do not turn up in school wearing identical garments. To make sure that clothes should not be uniforms, in some

CLOTHES for the seven ages of man come out of WPA sewing projects. Excess cotton finds a use in the layette which greeted this youngest lady (shown here) when she was born. The grown-up young lady has an overcoat which is a joint project of the sewing projects and the Civilian Conservation Corps. Discarded CCC clothing was cleaned, reworked, and then sewn up into this WPA creation. More cotton went to provide overalls for the wage earner and play clothes for his youthful companion.

States instructions have been given that no pattern is to be made up more than once in the same color or cloth.

But this precaution is the easiest of the many sewing room rules to put into effect. To insure that clothes are of high quality, State WPA consultants have got advice from the garment industry and on the basis of the best industrial practices have compiled manuals for the guidance of the supervisors and the workers on sewing projects. The sewing manual compiled and published by the Division of Women's and Professional Projects of the North Carolina WPA contains 75 pages of specific instructions on the manufacture of clothing.

Equipment that a sewing project should have is itemized. The height of the chairs for women workers is specified. The width of the cutting table is indicated. A table in this manual indicates what type of needle and thread should be used with each kind of cloth and the number of stitches per inch that should be made with each kind of thread.

From the National Bureau of Standards measurements for all standard sizes were obtained and these are tabulated in the sewing guide so that the wearers of WPA garments can be as well fitted (if not better, since not even all commercially produced garments fit their wearers) as the wearer of a garment out of the local department store. To protect against mistakes made in the size measurements, the manner of taking measurements is carefully detailed. To measure the bust, for example, the guide states, "Stretch the tape measure around the fullest part of the bust. It should be an inch higher in the back than the front." Another section deals with pattern alterations and instructions are given here to enable the workers to make the modifications in patterns that special circumstances may require. (See page 11 for the story on the Bureau of Home Economics work to standardize sizes for children's clothing.)

Right down the list of garments the manufacturing procedure to be followed in making each type of clothing is outlined. Illustrations accompany the text so there can be no misunderstanding. After working on sewing projects, as the result of the kind of instructions given, the women not only can put a dress together, but they understand the reason for each instruction.

WPA sewing project women, when they go buying clothes for their families in the future, will know what to look for in clothes, they will know differences between cloths, will be able to recognize good workmanship, and will know what to look for in deciding whether a garment will serve its purpose well or badly.

[Concluded on page 13]

A Message to Consumers

BY R. M. EVANS
Administrator, A. A. A.

OCCASIONALLY the mistaken argument is made that the farmer and consumer have fundamentally conflicting interests. "The farmer," it is sometimes said, "wants a high price, and the consumer wants a low price—in fact, the consumer would like to get for nothing the food which the farmer produces."

That's a mighty short-range view. Farmers who think, and consumers who think, know better. Excessively high prices are bad for sellers. Excessively low prices are bad for buyers. That's the sound economics of it. That's the actual experience of farmers and consumers in America.

For instance, in 1932 a farmer neighbor of mine gave away a carload of cattle to the people in a nearby town. He had tried selling. He had shipped a carload of steers to market, and the return had been so small he decided it was more sensible to give away the beef outright and be done with it.

So my farmer neighbor told the folks to come and help themselves. Butchers cooperated, and people just came and got the meat. By selling the hides he got more for this carload than from the first.

That free food was expensive for the people of the town. My farmer neighbor got no money to buy the goods the production of which means jobs for the people in the towns and cities. He could not exchange his goods for the goods produced by city workers. All over the country the same situation prevailed. Whether it was cattle or hogs, cotton or fruit or vegetables, farmers throughout the land were literally giving away the sweat of their brows and the fertility of their soil. Farms were foreclosed, farm families lost their homes, banks closed their doors, surpluses piled up, joblessness increased, breadlines got longer.

In the depression years we had surplus food and foreclosures, surplus bankruptcies and unemployment, surplus hunger and misery. Scarcity of everything that everybody wanted.

Farmers made up their minds that this should never happen again. Congress provided the authority. Farmers entered upon a program to balance America's farm abundance, protect farm income, conserve the soil, and make sure that consumers should obtain an adequate and steady supply of foods and fiber at fair prices. And speaking of consumers—today as a result of that farm program nearly six million farm family consumers of city products are back into the market for the purchase of city products.

Progressive minded farmers are interested in the efforts of consumers to test the quality of goods and services offered for sale. Such farmers are interested in the efforts of consumers to cut unreasonable costs. Farmers do such testing, make such intelligent efforts, in their own capacity as consumers.

Equally, consumers who are of alert minds are interested in the efforts of farmers to stabilize agricultural production. Such consumers are interested in the efforts of farmers to insure national prosperity by soundly adjusting production to consumption, by eliminating gluts and surpluses. For city consumers have themselves built up, in their capacity as producers, whether they are business, professional, or labor folk, organizations which endeavor to stabilize *their* activities even as the farmer is now stabilizing his.

This interest of farmers in consumers' efforts, and of consumers in farmers' efforts, is demonstrated increasingly. For we are all Americans, and we all strive to make the American dream of opportunity and security for the common man come true. Time was when every man could go his own way. Today in our complex society the achievement of the American dream depends upon the understanding of and cooperation with groups other than our own.

Vitamin Fancies and Facts

Scientists, cautioning consumers against believing everything claimed for vitamin products, say we are just at the beginning of vitamin wisdom

"FEELING SLUGGISH? Appetite bad? Losing weight? Complexion below par? In short, is there anything wrong with you? If there is, you need vitamins. You need them for breakfast, lunch, supper, and don't forget the good-night snack. You need Vitamins A, B, C, D, E, F, G, H—all the way down to Z—and you need them concentrated, a capital dose, something you can gulp down with a glass of water, or a pill to melt on your tongue. If you don't get them, beware. Quick, now . . . look for the package wrapped in cellophane. Take your vitamins three times a day, and you'll never have another doctor's bill. This is the twentieth century miracle—the fountain of youth, yours for the asking at your drug or grocery store counter."

Sounds like the modern version of the street corner medicine man who ballyhooed snake oil as the sure cure for everything, you say? Exhortations like these greet modern consumers at almost every corner, over the air, on paper, in packages. You are told you can get your vitamins in de luxe style or just plain. Once you have them, you are assured, your troubles are over. And you don't have to go far to get them. You can buy vitamin milk, vitamin rich soap ("soaks the vitamin in through the skin"), vitamin candy bars, vitamin tooth paste, and vitamin rich breakfast cereals. The world is waiting for the wizard who invents a vitamin hat!

The business in vitamins runs up to $100,000,000 a year, so consumers are to be pardoned for being impressed, and even for asking: Do I really need all these vitamins, or is this just a fad, like weight-reducing? The consumer does well to ask.

Even scientists in the laboratory have hardly laid the cornerstone of vitamin research. A good start has been made on tracking down vitamins, identifying them, busting them up into their own little family trees, but scientists will tell you they are only starting to learn the mysteries of these food nutrients. They know something of the best sources of the vitamins they are already acquainted with. They will inform you with some assurance of things likely to happen to you if you run shy on several vitamins. Only a little progress has been made in setting up requirements of the human body for each of the known vitamins. Some work has been done in developing methods of preparing foods with a minimum loss of vitamins. And, finally, the last few years have seen some progress in the preparation of what—for want of a better name—have been called "concentrated vitamins," in the form of capsules, pills, and fish oils (see *Consumers' Guide,* Vol. IV, No. 23).

Here the awed consumer inquires: "Do I need these concentrated vitamins?" There's no rule of thumb that answers that question.

Consumers should remember two things when they sit down to figure out the meaning of any type of vitamin ballyhoo.

First, the average person—unless his doctor tells him differently—can get all the vitamins he needs from a balanced diet of carefully selected foods, properly prepared, and served 3 times a day.

And, second, so far as scientists know now the only people who really need vitamin concentrates are babies and young children, expectant and nursing mothers, persons recuperating from sickness, and those following doctor's orders. If you think you need vitamins in a special form, go to your family physician. Chances are he can fix up your diet to give you an ample supply of vitamins. If he can't, he will give you a druggist's prescription, and you will take your "concentrates" in full knowledge that you are not acting on a hunch that can cause deep inroads in your personal budget.

Defining a vitamin would be a neat little problem to pose on any of the radio quiz programs. You can't be too specific about what they actually are without considering each one separately. Scientists in the Bureau of Home Economics, United States Department of Agriculture, describe them as "distinct chemical substances, each having its own special function to perform in the body." When scientists are as cautious as that, it's a wise consumer who pauses before believing everything said for these substances. Below is a digest designed to clear up the problem for consumers so far as present-day knowledge and research makes this possible.

VITAMIN A: Stimulates growth and aids general well-being. Without it, you may have defective teeth and bad bone formation, low resistance to infection, and arrested growth; loss of reproductive power can result from its absence in the diet. A shortage of the vitamin also results in inability to see well in a dim light. This is called nutritional night blindness, and should not be confused with impaired vision from other causes.

Vitamin A is found in eggs, butter, cheese, whole milk, cream, and fish-liver oils. Leafy greens, green and yellow vegetables provide "pro-Vitamin A," which is changed to the vitamin itself during digestion. The deeper the green or yellow color of the vegetables, the more Vitamin A you will get from them.

Since very little of this vitamin is destroyed in cooking, and practically none dissolved in cooking water, no special kitchen rules have to be followed for retaining it when preparing foods for the dinner table.

BABIES and children need ample supplies of Vitamin D (the "sunshine vitamin") for strong teeth and bones. Sunshine and play in the out-of-doors is the best way of insuring that the body gets full advantage of the vitamins contained in foods.

VITAMIN B (also called thiamin and aneurin): This one helps appetite. Without it, you tend to lose your appetite, become listless, have a sluggish digestive system, and nervous irritability. An absolute lack of the vitamin results in beriberi. An abundance of thiamin is essential for expectant and nursing mothers.

Richest sources are whole seeds (whole grain cereals, especially the germ portion), and legumes, including peanuts and soybeans. Green peas, and green lima beans, prepared properly, are well supplied with the vitamin, as are pork, chicken, kidney, liver.

Vitamin B soaks out into cooking water, is easily destroyed by heat, and the addition of baking soda to the cooking water greatly reduces the amount of Vitamin B. Follow this rule: Cook vegetables as short a time as possible, in the smallest amount of water, and use the cooking liquid. Don't add soda to the cooking water.

Roasting, broiling or stewing meat will cut its Vitamin B content almost in half.

VITAMIN C (also called ascorbic acid and cevitamic acid): The body does not store Vitamin C, as it does the other vitamins. Therefore, a daily supply is necessary. Serious deficiency of this vitamin results in bleeding gums, loose teeth, sore joints, loss of appetite with loss of weight, and fatigue. Scurvy follows on the heels of any prolonged shortage of the vitamin in the daily diet.

Citrus fruits and their juices—oranges, grapefruit, lemons, limes, tangerines—all abound in Vitamin C. Tomatoes and tomato juice are another major source for it. Various types of berries, cantaloups, any type of leafy and green vegetables are all good sources of Vitamin C.

Vitamin C is the most easily destroyed of all the vitamins in cooking, canning, and storing. Addition of soda to cooking vegetables destroys it. The rule to cook fast, use little water, and serve the cooking water is a good one to follow.

Less of the vitamin will be lost when foods are stored if they are put in a cool place. The fresher the vegetables, the greater their Vitamin C content. "Frosted" or frozen vegetables should be dropped immediately into boiling water when cooked, not "thawed out" gradually.

VITAMIN D: Vitamin D is essential for babies, young children, and expectant mothers. Well-formed teeth and bones depend on a good supply of this vitamin. A prolonged deficiency of it will result in rickets.

Best food sources for Vitamin D are fish-liver oils, salmon and other oily fish, and egg yolk. Because it is not present to any great extent in ordinary diets of children, nutrition specialists recommend that, until the age of 6, children receive from one to two teaspoons of cod-liver oil or its equivalent daily to insure good teeth and bones. The amount of cod-liver oil to give depends upon its Vitamin D potency.

A good cod-liver oil states on its label that it contains not less than 85 U. S. P. (United States Pharmacopeia) units of Vitamin D per gram. Most cod-liver oils are considerably higher in potency, and many low-priced oils meet or exceed the standard. A teaspoonful of a cod-liver oil that provides 150 international or U. S. P. units per gram will cover the Vitamin D requirements for the day in infancy and childhood. If a less potent oil is used, 1½ to 2 teaspoonfuls a day may be required.

Other vitamin products may also meet the standard, but mothers not familiar with vitamin units should consult their family physician if they want to be sure their children get an adequate supply.

Getting plenty of sunshine is another way of building up a supply of Vitamin D—often called the "sunshine vitamin." The human skin contains "pro-Vitamin D" which turns to Vitamin D under direct exposure to the sun for short periods every day. Many foods—such as milk—today carry on their labels the statement "irradiated with Vitamin D." Unless you are sure that the amount of Vitamin D provided in the irradiated food consumed by the child covers his daily requirements, it is wiser and cheaper to get the vitamin from fish-oils than to rely on these sources.

The best of vitamin scientists still say you can't buy sunshine in soap or face creams.

Vitamin D is not affected by ordinary cooking, and doesn't dissolve in water.

VITAMIN E: This vitamin is essential for reproduction. The germ of the wheat grain is an excellent source, as are vegetable oils and green vegetables.

The vitamin is not easily destroyed by heat.

VITAMIN G (also known as riboflavin): Work on this vitamin is still in the experimental stages, but research on animals shows that a deficiency of riboflavin results in retarded growth, loss of hair, and nutritional cataract. In human beings scientists now know that a shortage of the vitamin results in sores on the lips, and reddening and scaling of the skin about the mouth, nose, and ears.

Excellent sources of this vitamin are liver, kidney, heart, lean meats, eggs, cheese, milk (skim, whole, condensed, evaporated), turnip tops, beet tops, kale, mustard greens, and various types of seeds such as wheat germ, rice polishings, peanuts, and soybeans.

Riboflavin is not affected by cooking, but is easily destroyed if soda or other alkaline substances are present. It dissolves readily in cooking water. The rule: Serve the cooking water or dissolved juices with the food.

PELLAGRA-PREVENTING VITAMIN (nicotinic acid): One of the newer discoveries in vitamins, it made its debut without the formality

[*Continued on page 15*]

PORTS of entry establish miniature customs and immigration offices at the borders of States that enact this kind of legislation. Originally designed to prevent bootlegging of gasoline in States where gasoline taxes prevailed, they now are used to enforce highway laws on out-of-State trucks for hire.

Six Problems in Search of a Solution

*More barriers to trade in farm products from State to State, from region to region challenge consumers to join with farmers in opening the highways to more abundant consumption**

A **GEORGE WASHINGTON'S** modern double, retracing the journey the first President made from his home in Mount Vernon to New York City for his inauguration, took 7 full days to go from the Potomac River to Manhattan Island, a distance that nowadays automobiles can traverse in 9 hours, trains cover in 3½ hours, and airplanes plus busses complete in 2 hours.

Thousands of inventions have foreshortened time and distance since 1789. Vehicles, that would have seemed fantasies of a disordered mind to George Washington's contemporaries, whisk us from one side of a vast continent to another, carry delicate perishable goods to kitchens located thousands of miles from the gardens where they were grown, open vast markets to scattered or remote producers.

But speed sometimes generates frictions, and speed has generated frictions in the commerce between States, between regions, between one group of people and another. These are some of the "barriers to internal trade" which a special report to the Secretary of Agriculture puts under the spotlight.

Friction No. 1 has to do with differences in interterritorial freight rates in the 5 major railroad freight-rate territories of the United States: Southern, Southwestern, Western Trunkline, Eastern or Official, and Mountain Pacific. Freight rates in each of these regions are different.

Friction No. 2 is the difference between interstate and intrastate freight rates.

Friction No. 3 is the differences between the various State automobile license requirements and automobile taxes.

Friction No. 4 comes from lack of standard regulations regarding the size, weight, and the equipment of trucks in interstate commerce.

Friction No. 5 arises from port of entry legislation—laws by which States set up miniature customs-houses to examine all trucks which come into the State.

Friction No. 6 centers in taxes imposed on merchant truckers, the itinerant salesmen who are the modern equivalents of the old-time pack peddler.

Freight rate differentials are very much in the news. It's not easy to pass judgment on

---

**Third of a series of articles giving results of an analysis of "Barriers to Internal Trade in Farm Products," a special report recently made by the Bureau of Agricultural Economics to the Secretary of Agriculture. Earlier chapters appeared in the March 13 and March 27, 1939, issues of Consumers' Guide. A few free copies of complete report can be had by addressing Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C.*

their fairness or unfairness, their soundness or unsoundness. Many factors go into the making of freight rates: varying costs of handling commodities, the value of the services rendered, the kinds of commodities that must be hauled, and so on. After allowing for such factors, when any differences in rates still remain, they deserve to be scrutinized carefully to see whether they are acting as "barriers against the free flow of commerce, hampering and restricting the normal development of the Nation . . ." Uneconomic rate differentials impose penalties on consumers as well as producers.

WHEN NATIONS want to shut out foreign products and reserve their citizens' purchasing power for their own products, they erect tariff walls. States are forbidden by the Constitution to erect tariff walls against foreign countries or against each other. But when a State sets freight rates that are lower for State-produced goods than for out-of-State-produced goods, those rates can act just like tariffs between countries.

Back in 1905 an expert testified before the Interstate Commerce Commission on how efficient these barriers can be. He said: "Today you can establish protection by means of regulation of railroad rates in an astonishing degree of efficiency, and practically all of the commissions that have been active in railway rate regulation have done that."

One city, walled up outside its most important market by just this kind of discrimination, appealed to the Interstate Commerce Commission for relief. Shreveport, Louisiana, the city involved, went to the Commission after its merchants and manufacturers were practically barred from trading in Texas as the result of freight rates established by the Texas Public Utilities Commission. In the famous Shreveport Rate Case in 1914 an Interstate Commerce Commission order setting these rates aside was upheld by the United States Supreme Court. This decision gave the Commission power to deal with this kind of discrimination thereafter. The authority was reaffirmed by Congress in 1920.

Exercising this power the Interstate Commerce Commission in 1937 examined a number of freight rates established by Kentucky's Public Utility Commission. These rates were designed to give an advantage to Kentucky shippers over everyone else in Kentucky markets. Kentucky shippers could ship some commodities 150 miles for the same price charged out-of-State shippers for a 70-mile distance. Indiana growers who had always sold their produce in Louisville found suddenly that it was difficult to meet the prices of Kentucky growers because Kentucky growers could ship to market for so much less than they.

HEADACHES caused by freight-rate differentials come to a head more slowly and under more dignified conditions than those caused by motor-vehicle regulations.

Leo Jubb was going about his business of driving a truck with a New York license in Maine one day in June of 1933 when he was whistled over to the side of the road, taken into town, and made to pay a $75 Maine license fee on his truck.

Trigger-quick to reply, New York arrested 2 Maine truck drivers just as unoffending as Leo Jubb, but who failed to have New York license plates. From 1931 to 1937 there were "intermittent wars" between Illinois and Wisconsin. Truck drivers caught off base—that is, in Wisconsin with Illinois tags, and vice versa—were arrested. Perishable foodstuffs loaded on the trucks frequently perished in the engagements.

In November of 1932 Pennsylvania suddenly announced it would enforce a law on its statute books which required all out-of-State trucks operating for hire in the State to take out licenses. Up and down the highways leading into Pennsylvania the word went out to truck drivers to avoid Pennsylvania. Traffic on every highway leading into Pennsylvania was jammed up tighter than a cork in a vinegar bottle. New Jersey inspectors in a lightning stroke arrested 200 Pennsylvania trucks in 2 hours. "Tons of produce," the Report on Barriers to Internal Trade says, "were threatened with destruction."

REGISTRATION and license fees and gasoline taxes basically are meant to pay toward the cost of building, maintaining, and policing highways. Where truck traffic between two States is so balanced that what one State loses in the way of wear and tear on its highways is made up by the wear and tear of its own trucks on other States' highways, there should be no problem. But States, sometimes with justification, feel this is rarely the case.

Actually there are States so located that their highways suffer a great deal more wear and tear from out-of-State trucks than their own trucks inflict on out-of-State roads. Naturally they try to recoup the costs in taxes and fees. States which do not have this justification for levying taxes and fixing fees on out-of-State trucks are sometimes driven to it by what they feel are excessive taxes and fees on their trucks when they travel.

With 48 States and the District of Columbia fixing fees and levying taxes, a bramble of laws has grown up which not only snags traffic but which, understandably enough, sometimes pricks a temper or two.

Before the driver of a truck for hire may safely venture into a State he must first know about the insurance laws. Failure to conform with an unusual law may end up with the driver making long distance calls to his home town from a town lockup.

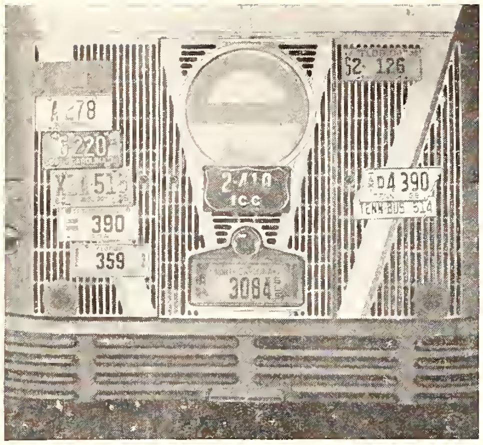
Before trucks in interstate commerce may enter some States, written applications for permission to enter the States must be made in advance. Sometimes permission to enter a State is not given by mail, but must be secured by proceeding directly to the proper authorities after crossing the State line.

South Dakota trucks until recently could make three trips a year into North Dakota without having to take out a regular North Dakota license. To do this, however, they had to buy a $5 identification tag. Then if they traveled over 10 miles, or if they penetrated more than 5 miles into the State, they had to get a permit from the North Dakota Board of Railroad Commissioners and arrange to pay a mileage tax..

Most liberal laws a trucker in interstate commerce faces are those in States that require no registration by out-of-State trucks, levy no special taxes on them, but which make this primrose highway contingent on reciprocal privileges for their own truckers in other States. Where such reciprocity does exist traffic is reasonably unimpeded. States with this measure of highway freedom are Massachusetts, New York, and Ohio.

Where States require out-of-State trucks to register, there is hardship on all trucks of course, but the hardest falls upon the occasional farmer and trucker who live in one State and sell their produce in one or two other States.

An out-of-State farmer who enters Wyoming in a 1-ton truck must pay an annual fee of $7.50. If it is a 2-ton truck he is driving he must pay $30, and if it is larger the fees increase steeply. After paying this fee he must then pay a county registration fee based on the valuation of his truck. If



LIKE visas on a passport, license plates sometimes clutter up the backboards of interstate for-hire trucks, just as this bus is plastered with plates. By passing laws which load unnecessary burdens and regulations on truck commerce, States tend to wall up trade and increase the cost of food to consumers.

he engages in "for-hire" trucking he must pay more fees and a ton-mile tax.

RED TAPE, however, is only ankle-deep by the time a trucker has registration and fee regulations straight. Before he can do business he must plunge head over heels into the complexities of the rules which fix the size and weight of trucks.

Every State in the Union has a law which fixes either a maximum or net weight limit for motor vehicles. Calculated maximum permissible weights range from 18,000 pounds, which is the legal limit in Kentucky and Tennessee, to 120,000 pounds, the legal limit in Rhode Island.

Not only are the limits different in most States but frequently the limits at State lines will be at opposite ends of the scale. Connecticut allows only 40,000 pounds while Rhode Island allows 120,000 pounds; Kentucky allows only 18,000 pounds while Illinois will accept truckloads of 72,000 pounds. Trucks may weigh 84,800 pounds in Montana but only 48,000 pounds in Wyoming.

Thus trucks which are perfectly legal in one State sometimes cannot even enter an adjoining State. And if the State with the lower limit lies across important highways, this means that the larger trucks are barred from interstate commerce.

Laws dealing with the clearance lights trucks must display are equally murky. To conform to the laws of one State truck carriers must sometimes arrange their red, blue, and green lights so that they violate the laws of other States.

Altogether these regulations not only impede commerce but sometimes hog-tie and throw it completely.

FORTUNATELY, or unfortunately, depending upon the point of view, these laws are not always enforced. Where they are not enforced the threat of their enforcement is enough to give farmers, shippers, trucking companies, and truckers the jitters.

A Texas law which limits net loads to 7,000 pounds (14,000 pounds if the trucks are headed for a Texas railroad station) is enforced. On April 1, 1938, for example, 13 truck drivers, all of them with loads of fruits and vegetables, were arrested. All of them were fined, and in addition they were required to dump fruits and vegetables weighing, in each case, from 2,500 to 3,000 pounds.

Another type of regulation, the Port of Entry laws, turns out-of-Staters into full-fledged foreigners who must practically pass through an immigration office to drive a truck into another State. Kansas first erected this barrier along its State line. In the beginning, the Port of Entry law was passed to prevent the bootlegging of large quantities of gasoline into Kansas. Gradually the Port of Entry limitations were broadened until today all trucks entering the State are required to secure clearance.

Inspectors require out-of-State drivers to fill out an elaborate form describing the truck, its load, and its proposed route through the State. Then the truck is inspected to see if it meets with all of the Kansas requirements. Finally the driver must show that the truck is insured, and pay all the taxes to which he and the truck are subject.

FRICTION NO. 6 rubs on the persons engaged in selling produce from trucks.

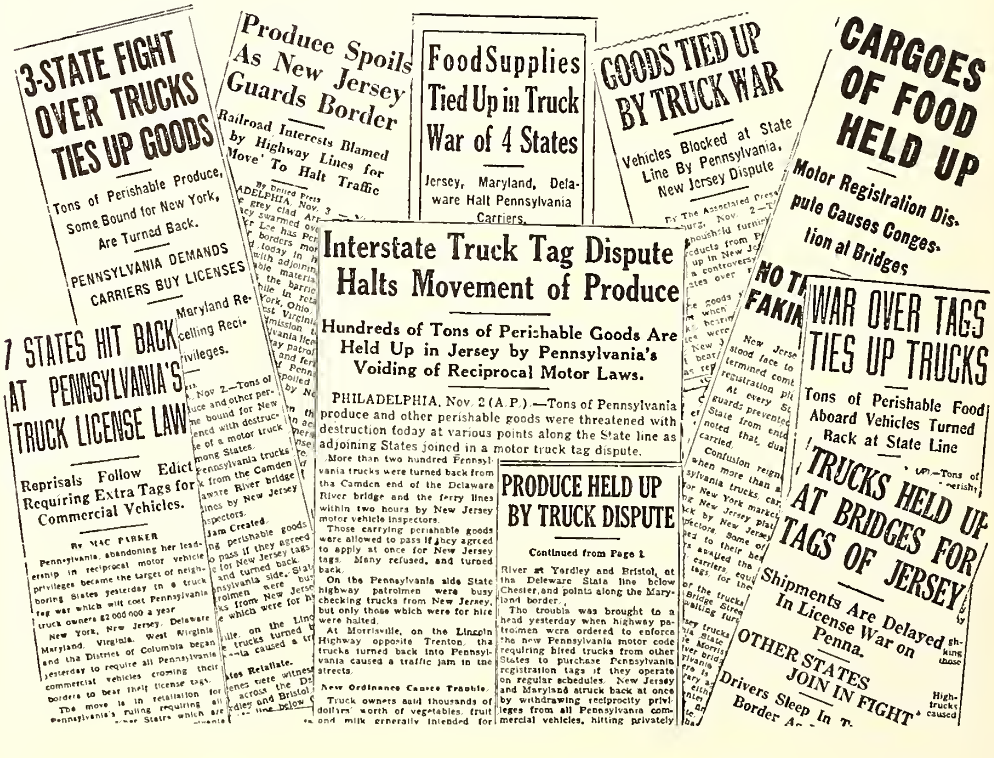
Hogs and cattle used to be bought, assembled, and shipped to large cities by hundreds of livestock buyers, dealers, and cooperatives throughout the country. Today this business is passing over to merchant truckers who drive out into the country, buy cattle and hogs from the farmers, load them onto their trucks, and haul them down highways to stockyards in large cities.

A good part of the onion crop of Massachusetts, the peach crops of Michigan and Illinois, some of the citrus fruit harvest of Texas, go to market in trucks with merchant truckers at the wheel.

Sometimes the merchant trucker hauls his produce to market and sells it to a wholesaler, sometimes to a retailer, and sometimes directly to consumers. "He competes with and sometimes shortcuts the old, established middlemen," the Bureau of Agricultural Economics reported to the Secretary of Agriculture.

[*Concluded on page 15*]

TIT-FOR-TAT laws, passed by one State in retaliation for regulation of that State's trucks in another State, have sometimes resulted in costly border wars. Reciprocity between States, too, sometimes breaks down and a border war breaks out. During these interstate hostilities, produce spoils, trade is tied up, farmers and consumers are the losers.



3-STATE FIGHT OVER TRUCKS TIES UP GOODS

Tons of Perishable Produce, Some Bound for New York, Are Turned Back.

PENNSYLVANIA DEMANDS CARRIERS BUY LICENSES

Produce Spoils As New Jersey Guards Border

Railroad Interests Blamed by Highway Lines for 'Move' To Halt Traffic

Food Supplies Tied Up in Truck War of 4 States

Jersey, Maryland, Delaware Halt Pennsylvania Carriers.

GOODS TIED UP BY TRUCK WAR

Vehicles Blocked at State Line By Pennsylvania, New Jersey Dispute

CARGOES OF FOOD HELD UP

Motor Registration Dispute Causes Congestion at Bridges

7 STATES HIT BACK AT PENNSYLVANIA'S TRUCK LICENSE LAW

Reprisals Follow Edict Requiring Extra Tags for Commercial Vehicles.

By MAC PARKER

Interstate Truck Tag Dispute Halts Movement of Produce

Hundreds of Tons of Perishable Goods Are Held Up in Jersey by Pennsylvania's Voiding of Reciprocal Motor Laws.

PHILADELPHIA, Nov. 2 (A.P.).—Tons of Pennsylvania produce and other perishable goods were threatened with destruction today at various points along the State line as adjoining States joined in a motor truck tag dispute.

More than two hundred Pennsylvania trucks were turned back from tha Camden end of the Delaware River bridge and the ferry lines within two hours by New Jersey motor vehicle inspectors.

Those carrying perishable goods were allowed to pass if they agreed to apply at once for New Jersey tags. Many refused, and turned back.

On the Pennsylvania side State highway patrolmen were busy checking trucks from New Jersey, but only those which were for hire were halted.

At Morrisville, on the Lincoln Highway opposite Trenton, the trucks turned back into Pennsylvania caused a traffic jam in the streets.

New Ordinance Causes Trouble.

Truck owners said thousands of dollars' worth of vegetables, fruit and milk generally intended for

PRODUCE HELD UP BY TRUCK DISPUTE

Continued from Page 1

River at Yardley and Bristol, at the Delaware State line below Chester, and points along the Maryland border.

The trouble was brought to a head yesterday when highway patrolmen were ordered to enforce the new Pennsylvania motor code requiring hired trucks from other States to purchase Pennsylvania registration tags if they operate on regular schedules. New Jersey and Maryland struck back at once by withdrawing reciprocity privileges from all Pennsylvania commercial vehicles, hitting privately

WAR OVER TAGS TIES UP TRUCKS

Tons of Perishable Food Aboard Vehicles Turned Back at State Line

TRUCKS HELD UP AT BRIDGES FOR TAGS OF JERSEY

Shipments Are Delayed In License War on Penna.

OTHER STATES JOIN IN FIGHT

Drivers Sleep In T

A New Deal for Young Consumers

5 million children's measurements, analyzed by the Bureau of Home Economics, provide the basis for standardizing the sizes of children's garments

JUNIOR and sister may not know it yet, but they are due to get clothes that fit them in the not too far off future. For the Bureau of Home Economics has just completed a study of children's body measurements which are based on actual living children, something which cannot be said for the basis of present children's garment sizes. These measurements, it is hoped, will serve as the basis for standardized sizes in children's garments.

Everyone has heard mothers say that their Johnny was 8 years old but he wore age 12 blouses; he was so big for his age. Mothers in this case are obliquely criticizing the kind of sizes children's clothes come in. And they have good reason.

There is very little rhyme, very little reason, and even less standardization in the sizes of children's clothes now.

Sizes which say Age 8 or Age 10 have no meaning. Age 10 at one store may be bigger or smaller than Age 10 at another store, or Age 10 in another garment in the same store.

Badly sized children's garments result in 10 million dollars' worth of returns each year, it is estimated, and this makes children's clothing cost parents more.

Where alterations must be made by parents they are a needless nuisance. Where they are made by the stores they are a needless expense, add further to clothing costs. Well-fitted clothes make children happier. Badly fitted clothes embarrass children and are likely to be discarded sooner than the well-fitted variety.

Finally the unpredictable sizes that children's clothes come in make it necessary for parents to drag children along to the store every time a purchase is made. If sizes were standardized mothers could buy on the basis of known measurements.

Everybody then, junior, sister, father, mother, the stores, the manufacturers, and the pattern makers, all have been dissatisfied with the sizes children's clothes come in.

But no one could do anything about this situation because there were no measurements of children which could be used as the basis of a set of standard garment sizes.

IN THIS PREDICAMENT the Bureau of Home Economics of the Department of Agriculture, with the assistance of the NYA and the WPA, came to the rescue. Funds were supplied by the WPA and the NYA furnished workers in some of the States.

Armed with instruments that had been carefully calibrated, a small army of specially trained field workers set out, under the direction of the BHE, to track down American children and to get them to stand still long enough to submit to 36 critical measurements. Altogether 5 million measurements of 145,000 children in schools, playgrounds, clubs, and anywhere else children are likely to be found, were taken. The children ranged from 4 to 17 years in age.

Bureau of Home Economics statisticians then worked over these 5 million measurements and reduced them to simple tables.

Analysis revealed that age is the worst possible guide to go by in buying children's clothes. The most accurate way of getting at the problem of children's sizes, it was discovered, is through the use of any one of three sets of measurements: height and girth of hips, height and girth of chest, or height and weight.

Of the three sets of measurements the combination of height and girth of hips seems to be easiest to work with. These key measurements tell clothing experts how tall a child is and how thick he is. From them they can predict all the other necessary garment measurements.

Around the basic body measurements the BHE has taken of American children, the American Standards Association will coordinate efforts to set up a basic set of standard body sizes for use in sizing children's garments.

STANDARD SIZES

THIS child received a certificate with the Department of Agriculture seal on it to show that she had served as a typical American girl in the monumental study the Bureau of Home Economics made of the measurements of American children. These measurements will serve as the basis for accurate standardized sizes for children's garments.

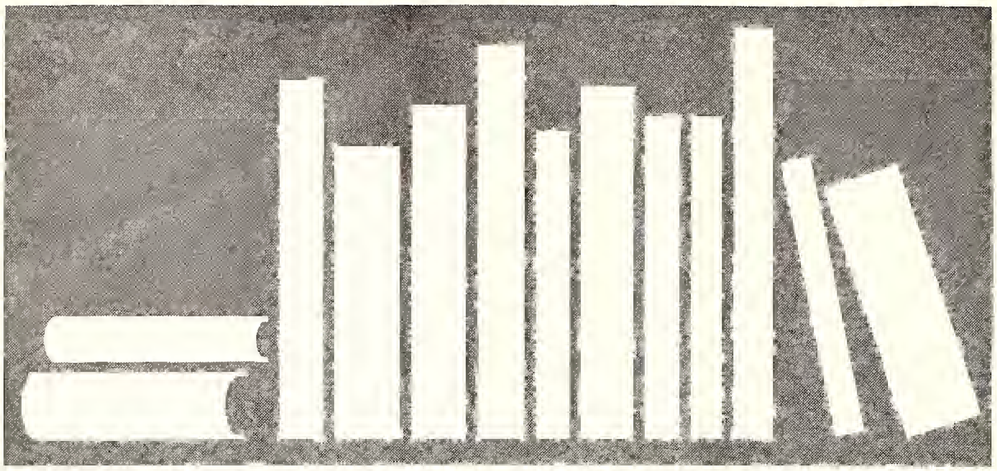
To push this work along, recently the American Standards Association called a meeting in New York City where plans were laid to develop an "American Standard System of Sizes for Children's Garments and Patterns." At the meeting there were present representatives of pattern manufacturers, garment makers, retailers, consumers, and technical experts from Government and private industry.

The first job ahead of this committee is to select a set of physical measurements to use as the basis of standard sizes. After this is done the American Standards Association will undertake the job of winning support from all interests concerned for the new standard body measurements.

Once this basic problem is solved, then manufacturers and pattern makers will be in a position to adopt an "American Standard System of Sizes for Children's Garments and Patterns." They will be Junior's assurance that his clothes actually fit his measurements.

The American Standards Association is a federation of many organizations interested in standards. Its membership includes industrial organizations, trade bodies, Government agencies, and consumer organizations.

Rank and file consumers, who have been paying the price of unsatisfactory children's garment sizes in higher prices and irritation, should watch the development of children's garment size standards with particular interest.



CONSUMERS' BOOKSHELF

HOSIERY FOR WOMEN. A Buying Guide, by Margaret Smith, Textiles and Clothing Division, Bureau of Home Economics. 1939, pp. 24. Address: Superintendent of Documents, Washington, D. C. 10 cents. Profusely illustrated, graphic description of the 10 points consumers should watch in selecting stockings if they want to get the best value for their money. Useful both for home reading and classroom study.

SCIENTIFIC CONSUMER PURCHASING, by Alice L. Edwards. Social Studies Series. 1939, pp. 81. Address: American Association of University Women, 1634 Eye Street, NW., Washington, D. C. 60 cents for study guide pamphlet. $1.25 for pamphlet plus a kit of supplementary study materials bearing on problems mentioned in the guide. This study guide for consumer groups considers the position of the consumer buyer in our present-day economy; analyses present sources of consumer-buying information; and suggests plans for study of such commodities as hosiery, sheets and blankets, bedding and upholstery, refrigerators, and canned fruits and vegetables.

PROCEEDINGS OF THE NATIONAL HEALTH CONFERENCE, JULY 1938, by U. S. Interdepartmental Committee to Coordinate Health and Welfare Activities. 1938, pp. 163. Address: Superintendent of Documents, Washington, D. C. 35 cents. A general discussion of national health needs, explaining the necessity for the expansion of public health services, hospital facilities and medical care for the needy; and a general program of insurance against loss of wages during illness.

THE NATION'S HEALTH, by U. S. Interdepartmental Committee to Coordinate Health and Welfare Activities. 1939, pp. 116. Address: Superintendent of Documents, Washington, D. C. 20 cents. Explains the background for the meeting of the National Health Conference, held to consider proposals for a 10-year program in the fields of health and medical care for the country as a whole. These proposals are discussed in detail in the pamphlet listed above, "Proceedings of the National Health Conference."

TOWARD BETTER NATIONAL HEALTH, by U. S. Interdepartmental Committee to Coordinate Health and Welfare Activities. 1939, pp. 30, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Gives a brief, popular summary of the report of the Technical Committee on Medical Care recommending the participation of the Federal Government in the health services of the nation, as discussed in the pamphlet, "Proceedings of the National Health Conference."

CONSUMERS' COOPERATION IN THE UNITED STATES, 1936, by Florence E. Parker. Bulletin No. 659 of U. S. Bureau of Labor Statistics. 1939, pp. 207, illus. Address: Superintendent of Documents, Washington, D. C. 25 cents. Contains information on the policies, resources, and activities of consumer cooperative enterprises, such as retail distributive, local service, telephone, and insurance associations; credit unions and district federations. Additional chapters consider the educational and recreational aspects of the cooperative movement, cooperative associations as employers, and the legal status of cooperatives.

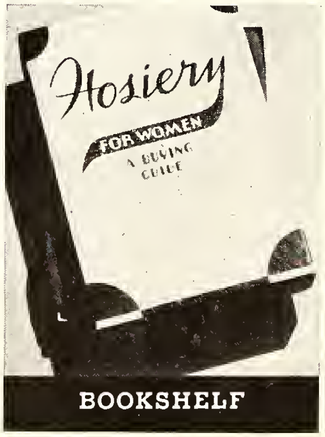
ANNUAL REPORT OF THE CONSUMERS' COUNSEL OF THE NATIONAL BITUMINOUS COAL COMMISSION FOR THE FISCAL YEAR 1938. 1938, pp. 14. Address: Consumers' Counsel, National Bituminous Coal Commission, Washington, D. C. Free. A discussion of the policies, activities, and achievements of the Consumers' Counsel for 1938.

CREDIT FOR CONSUMERS, by LeBaron R. Foster. Public Affairs Pamphlet No. 5. Revised 1938, pp. 32, illus. Address: Public Affairs Committee, 8 West Fortieth Street, New York, N. Y. 10 cents. Treats of the various kinds of consumer credit, how to use credit to advantage, why consumer credit is expensive, and a program for the control of credit practices for consumer protection.

BLANKETS, SHEETS, AND TOWELS FOR THE HOME, by K. P. Hess. Bulletin 281. 1938, pp. 31, illus. Address: Extension Service, Kansas State College, Manhattan, Kans. Free to residents of Kansas; one copy free to nonresidents, extra copies 5 cents each. Considers buying pointers and suggestions for care of blankets, sheets, and bath towels.

INDUSTRIAL PRICE POLICIES, by Maxwell S. Stewart. Public Affairs Pamphlet No. 23. 1938, pp. 33, illus. Address: Public Affairs Committee, Inc., 8 West 40th St., New York, N. Y. 10 cents. A report giving information on the price policies of typical industrial organizations with attention directed particularly to the economic and social effects of such practices.

FARMER CO-OPS IN VIRGINIA, by R. C. Dorsey. 1939, pp. 20, illus. Address: Farm Credit Administration, Washington, D. C. Free. Presents discussions and statistical information on various types of farm marketing cooperatives in Virginia.



HABERDASHERS TO THE NEEDY

[*Concluded from page 5*]

Overalls have been manufactured which compare favorably with commercially manufactured overalls.

Little girls' dresses have been made which are far better in quality than those which relief families could buy if the same amount of money expended by the local communities had been spent on similar garments.

In some of the Western regions sheepskin coats have been made. When the drought made necessary the purchase by the Federal Government of thousands of drought-stricken cattle, many hides were tanned and made into leather coats on the sewing projects.

Salvaged clothes from the Civilian Conservation Corps have been cleaned, renovated, and turned over to the sewing projects to be cut down into garments for school children.

Cotton purchased by the Federal Surplus Commodities Corporation as part of the program to bring relief to cotton farmers was turned over to the sewing projects and made into mattresses for use in publicly owned hospitals and institutions, and sometimes to the families on relief.

Blankets and comforts have been made on the sewing projects and distributed to people on relief.

THIS IS THE WAY it works: A city government, a State government or any public agency applies to the Works Progress Administration and offers to sponsor a WPA sewing project. It undertakes to provide a place for the operation of the project, to pay for utilities, to supply equipment, and to pay for all or part of the cost of the materials used. Sometimes the sponsoring agency also agrees to pay for part of the supervisory personnel. WPA, in exchange, supplies labor from relief rolls, organizes the project, and puts it to work making clothes.

Production by a project, once it is set up, is determined by the needs of the city. Families on relief tell their case workers what clothes they need. School teachers report that certain children are out of school because they do not have clothes. An institution certifies that it is unable to purchase or make sheets. A hospital certifies that its funds cannot purchase enough surgical dressings. Case workers request overalls for the men in families on relief. All these orders are filed at the project headquarters and work begins immediately to fill them.

When clothes are ready families on relief are given orders which they take to a relief warehouse. There the order is filled, and the next day a child who has been absent from school because he had no clothes is back at his desk, or a husband dresses in a new suit and begins a renewed search for a job.

Why cities and States sponsor these projects is plain enough. First, out of simple humanity, to obtain clothes for people who need them. Wages paid to the women in sewing rooms add to the community's purchasing power. These women are taken off city or county welfare rolls and this lightens the relief burden of the community. Finally, industry benefits because the sewing projects make a market for textiles that would otherwise not exist. If clothes were not available through the WPA to the families on relief, they wouldn't get clothes at all. Cotton would pile up in warehouses, while people holed up in their homes because they had no clothes to wear.

CLOTHING PROJECTS range in size from the very largest in New York City which employed an average of 3,851 persons from July to November, 1938, and produced $2\frac{1}{2}$ million garments, to projects which employ 10 persons (the minimum permitted) and which produced last year about 25 garments a day.

Take a city that isn't necessarily typical but which happens to be close at hand and to have all its statistics compiled—Washington, D. C.

Just above Pennsylvania Avenue in Washington there is a neighborhood of warehouses, old stores, slum dwellings, and abandoned churches which will eventually be leveled off to provide space for a new municipal center. The land has been purchased by the city, the buildings have been condemned, and money has been appropriated for the new buildings.

When the depression hit Washington it found this city, like most others, completely unprepared for what was to come. There were no agencies for the administration of public assistance to the unemployed, and no facilities to house them after they were created. Slowly these agencies came into existence. Personnel was employed. In the emergency, warehouses were put to use as homes for the transient unemployed, old buildings were transformed into offices. The emergency relief agency was housed in an abandoned church.

It is in this church, a red brick building, sheltered by hundred-year-old elm trees, that the headquarters of the sewing project in Washington are set up.

As you enter the church for a moment you are unaware that it is not a church. The pews seem to be filled, and the transept seems to be murmuring with what might be prayers.

Suddenly you realize that these are illusions, that the pews have been removed, and that what you take for worshippers are women pedaling at sewing machines which form geometrically straight rows right up to the pulpit platform. In front of the pulpit platform there is a long table where the cutters work. On the pulpit platform there are men tailors sitting at a board table making men's clothes. In one office off the pulpit there is a first-aid room; in the other the project supervisor maintains her office. In the balconies are more sewing machines.

The sound you heard when you entered is the whir of sewing machines. Each woman at each table is wearing a neat white apron made on the project. This not only insures that the clothes made are kept clean but also saves wear and tear on the project workers' clothes.

As you walk through the church you notice that one group is working on overalls. Another section of the room is working on dresses; a third is sewing up boys' blouses. In one corner there is a cluster of women who are at work on a variety of garments and materials. They are on private, not project jobs. Some families in the city unable to find a seamstress to do their sewing have sent sewing to the project to be done. To develop the skill of the workers the project permits the women to work on these private jobs on their own time. When work comes in, a woman is assigned to the work and she is taken off the project pay roll. She is paid for the work by the private family. When the work is finished she goes back to the project.

MOST OF THESE WOMEN, it is explained, have learned to sew on the project. One woman graduated into a shop of her own. Another discovered that she had a positive talent as a clothing cutter and designer and she has gone to work in private industry.

In Washington there was an average of 1,050 women employed on the sewing projects during 1938. Altogether they made 181 thousand garments.

For these garments the city contributed $75,000 for materials, and to this the Federal Government added about $5,000 for the purchase of other essential materials.

But statistics don't describe WPA sewing projects. Behind each little digit is a human being whose industry—made possible by public funds—is turning out clothes for the needy, utilizing surplus products from the farms, and earning for his or her own family a wage that keeps it going.

ON THE CONSUMER FRONT

JUNE 25, 1938—the day President Roosevelt signed a new Federal Food, Drug and Cosmetic Act setting up new controls over the sale of substandard and dangerous products moving over State lines—marked the beginning of a demand for more house cleaning. Not all these products cross State lines in their march to consumers' kitchens, medicine cabinets, and dressing tables. Many are produced and sold within the same State and control over them lies not in Federal, but in State, law.

Every State has its own Food and Drug law. Few match the new Federal law. In some States, controls exceed the Federal law in stringency; in others, the State laws are less protective of consumer interests.

With a new Federal law as a pattern and a standard toward which to lift laggard laws, trade as well as consumers in the States have been busy in the past year bringing greater uniformity into food and drug legislation. Practically all the State legislatures are now ready to adjourn or are adjourned; it is possible therefore to sum up what has happened.

Five States have passed new Food, Drug and Cosmetic Laws, or brought old laws more or less up-to-date by amendment. The States were Arkansas, Indiana, Nevada, North Carolina and Wyoming.

Wyoming's law applies only to cosmetics. The other laws and amendments apply to all three types of commodities—foods, drugs, and cosmetics.

Intentions don't always grow up to be achievements, but the statement of intentions in the Indiana law sums up what people in that State hope to achieve through their Food and Drug law.

"This Act is intended," the law reads, "to enact State legislation which

"(*a*) safeguards the public health and promotes the public welfare by protecting the consuming public from injury by product use and the purchasing public injury from merchandising deceit, flowing from intrastate commerce in foods, drugs, and cosmetics, and

"(*b*) is uniform with . . . the Federal Food, Drug and Cosmetic Act and the Federal Trade Commission Act, and

"(*c*) thus promotes conformity with such laws and their administration throughout the United States."

All 4 States adopt as their own the standards and regulations promulgated under the Federal Food, Drug and Cosmetic Act.

Unanimously, too, the 4 States all adopt the same enforcement procedure, a tagging device. Under it a State inspector may put a tag on any food, drug, or cosmetic which he suspects of violating the law. The tag, in effect, quarantines the product. After a tag is affixed to a product it may not be moved or sold until its fate has been determined in court.

Under Federal law, there are no tags. Instead the Federal Food and Drug inspector requests a United States Attorney to take steps to stop a suspected article. Steps, of course, involve going to court.

Nevada, North Carolina, and Indiana give their Food and Drug agencies, in addition, a power which Congress gave to the Federal Trade Commission: control over false advertising.

Consumers in these 4 States, to mention some of the new guarantees they have when they buy foods, drugs, or cosmetics, now are protected against dangerous coal tar dyes. By adopting the provisions of the Federal law they require foods, drugs and cosmetics in their States to use only Federally certified coal tar dyes. They protect themselves against the possible introduction of dangerous new drugs by adopting the Federal provision which requires approval of new drugs before they are sold. Finally consumers in these States will profit from the promulgation of the standards of identity and quality under the Federal law. As these standards take effect Federally, under the laws of these 4 States, they will also take hold on intrastate products.

To find out what kind of State food and drug laws they have, consumers may write to the clerk of their State legislature in their State capital for a copy of the statute. For copies of the Federal Food, Drug and Cosmetic Act, they may write to the Food and Drug Administration, Department of Agriculture, Washington, D. C.

RESEARCHING at home on a private consumer project, a consumer recently examined all the cans in her pantry just to find out for herself how confusing can sizes are. In the middle of her research she came across 2 different brands of canned tomatoes. Taking one she looked at the label and found that it said the contents weighed one pound 3 ounces. Looking at the second can, her first impression was that it was larger than the first can. She got out a ruler and measured the cans, top to bottom, edge to edge. They were both the same size.

She took them to her husband and asked him which was the larger. He picked the one she did.

Debating between them why it was that their eyes deceived them, they learned what was up. It was the color scheme of the label. One label, the one on the larger-appearing can, was half red, half white. The other label was solid brown. Evidently color schemes on labels can create optical illusions about size.

The thing to do, they reasoned, is to be a skeptic; read the labels carefully, particularly the net weight legends; don't guess from the appearance of a label that one can is larger than another.

WHAT HAPPENS, a curious consumer has asked the *Consumers' Guide,* if a dealer disobeys a Federal Trade Commission "Cease and Desist Order?"

Answering this question requires an examination of the "Cease and Desist Order" itself. When the Federal Trade Commission believes the FTC Act, or its amendments, are being violated it cites the alleged violator. Hearings are held, to which the person charged with the violation may present evidence, and then if the original suspicion is borne out, a "Cease and Desist Order" is issued.

The "Cease and Desist Order" does not have the force of law for 60 days after it is issued. During the 60-day period the person against whom the order has been issued may challenge it in a Federal Circuit Court of Appeals. If he does not challenge the order during the 60 days it then has the force of law. Or if he does challenge it and the FTC is upheld, the order again has the force of law. Of course, a cited dealer may win his case, and in that event the order is invalid.

Violators of the "Cease and Desist Order," after it takes effect, are punished, with one exception, in the Civil Courts. Persons who violate the orders may be sued in Civil Court by the FTC for $5,000 for each violation.

The one exception applies to persons who, with the intent to defraud and mislead, advertise products which may be injurious to health. They are subject to criminal prosecutions leading to a $5,000 fine and 6 months in jail for a first offense, and to $10,000 fines for offenses after the first.

Recently in Chicago a drug manufacturer was haled into court under both these provisions of the FTC act. He is now being sued in a Civil Court for $30,000 by the FTC, $5,000 for each of 6 violations of a "Cease and Desist Order" and in addition, he is defendant in a criminal action which charges him with advertising, with the intent to defraud and mislead, a product which may be injurious to health.

VITAMIN FANCIES AND FACTS

[*Concluded from page 7*]

of getting a letter attached to its name. Deficiency of nicotinic acid results in pellagra. Loss of appetite, loss of weight, and general weakness are the early symptoms. In its worst stages the disease results in sore mouth, digestive and nervous disturbances, and skin eruptions.

In the past few months scientists have succeeded in producing nicotinic acid in the laboratory at an almost negligible cost. Hailed as one of the foremost scientific advances in recent years, the discovery promises to be a major weapon in the fight against pellagra in regions of the country where the disease is prevalent.

Best food sources of nicotinic acid are lean meat, chicken, liver, leafy, green vegetables and green or dried peas and beans. Nicotinic acid dissolves readily in water.

In general: Generally the family whose daily diet includes plenty of fresh, green vegetables, fruits, cuts of meats, animal organs, milk, butter, cheese, eggs, whole grain cereal products, and legumes should not have any vitamin troubles. Special vitamin concentrates have to be resorted to only when your doctor says so, and when there are babies and young children in the family who need Vitamin D.

As important as proper choice of diet are proper cooking methods. Thiamin, ascorbic acid, riboflavin, and nicotinic acid all dissolve readily in water. To get the most out of foods rich in these vitamins, cook them in the smallest amount of water possible, and then serve the liquid in the form of a sauce, gravy or soup. Foods rich in thiamin and ascorbic acid (easily destroyed by cooking) should be cooked as quickly as possible; in no case should soda be added to vegetables well supplied with these vitamins, or, for that matter, to any vegetables.

Tens of thousands of American families, well able to afford proper diets, suffer from lack of certain vitamins, even though they are only "borderline cases." Unwise selection of the daily menu is the major cause. All consumers, whether with bulging purses or with thin ones, should as far as possible plan their diets with an eye to health value as well as appetite appeal.

SIX PROBLEMS IN SEARCH OF A SOLUTION

[*Concluded from page 10*]

Middlemen, however, like other men for that matter, do not go down without fighting.

Going into battle they have asked for and obtained restrictive legislation against merchant truckers which have struck alike at merchant truckers and farmers who sell their own produce. Today the statutes are full of State, city, and county regulations and are driving some merchant truckers out of business, and raising the costs of doing business to others. And consumers are footing the bills.

In many States merchant truckers must take out licenses and post bonds. Nebraska requires of merchant truckers a license fee of $25 plus a tax of $10. In Montana the price of this license shoots up to $100 with the additional requirement that each merchant trucker must post a bond of at least $1,000.

Piling tax on tax, some States require merchant truckers to take out licenses in each county they do business in.

Cities also sometimes jump on the merchant trucker with both feet. Denver, Omaha, Pittsburgh, Mobile, Baltimore, Cleveland, and St. Louis insist on the payment of a tax of $200 before they permit peddlers to do business.

Usually local growers are exempted from the payment of these fees, but sometimes the laws are framed so that farmers must sell their own produce to claim tax and license exemptions. Sometimes farmers who want to market their own produce, but who do not raise enough produce to haul a full load to town at any one time, must either come to market with an uneconomic half-load or give up selling their own produce in the city altogether.

People, singly and in delegations, have complained about the laws, but still very little in the way of a general solution has been turned up.

Reciprocity might help, people say. But reciprocity between States has a way of breaking down suddenly and causing more trouble. Besides reciprocity solves the problems of licenses but not the problems arising from regulations regarding sizes and weights. National organizations have drafted uniform State laws and have solicited support for their enactment. But, the report notes, "the national organizations' influence in securing uniformity has not been striking."

Finally people have bethought themselves of the Federal Government. "Why not a Federal law?" they ask. There is a Federal law, the Motor Carrier Act of 1935. One thing this Federal law has done has been to introduce order into the regulations regarding lights, brakes, flares, and the equipment on trucks for hire in interstate commerce.

This law does not prevent the States from setting up additional standards. Under it, however, some States have been induced to bring their requirements into line with the Federal requirements.

Defects in the present Federal law do not deter the advocates of Federal action. One legislative action can correct these flaws, they say, and might also bring about peace and order in the chaos of present motor regulations.

The law these persons propose would provide for only 2 registrations of trucks which engage in interstate commerce: registration in the home State, and registration with the Interstate Commerce Commission. Then once a truck conformed to the regulations of its home State and to those of the Federal Government it would be free to go anywhere in the country without any further interference.

A famous playwright once wrote a play about six characters in search of an author. Here are six transportation problems in search of a solution. "We'll cause trouble," they say, "if you don't take care of us." "We'll add costs to the price of food." "We'll create situations in which food will be dumped along the side of highways." "We'll let foods deteriorate on farms, we'll let people go hungry in cities."

The solution of these six problems, like the author for the six characters, probably will come from the audience—an audience made up of consumers and producers.

Six problems, you might say, are looking for people who want to go forward together toward a better nourished America.

IN THIS ISSUE

MAY 1, 1939 ● VOLUME VI, NUMBER 2

Haberdashers to the Needy 3

A Message to Consumers 5

Vitamin Fancies and Facts 6

Six Problems in Search of a Solution . . . 8

A New Deal for Young Consumers 11

Consumers' Bookshelf 12

On the Consumer Front 14

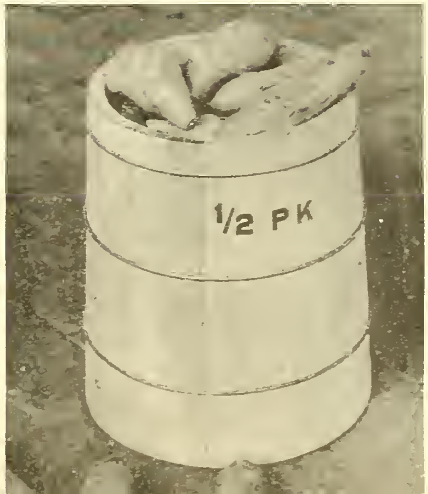
U. S. GOVERNMENT PRINTING OFFICE 147056

Cp. 2 1.94 AD4.22

U. S. F. S. RECEIVED
LIBRARY
JUL 11 1939

CONSUMERS' GUIDE

MAY 15, 1939



CONSUMERS' GUIDE

MAY 15, 1939 VOLUME VI, NUMBER 3

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly in June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

WE DON'T KNOW if there has yet been any such character as a "consumer celebrity," but if not, then the winner of our recent weights and measures quiz—Mrs. Paul V. Clumpner of Metaline Falls, Washington—has created the rôle.

No sooner did the announcement of Mrs. Clumpner's victory reach Metaline Falls, than she became front-page news. From the front page she moved to the women's page, when she found herself being asked to speak on consumer problems before women's organizations.

"It was an eventful day in my life when I received your telegram saying that I was the winner of the *Consumers' Guide* quiz," she writes. "The thrill of a lifetime!"

"It wasn't long before our local papers were spreading the news of my good fortune, and I was asked to speak on 'Consumer Education' at the county meetings of home economics clubs. The women have become so interested . . . that they have decided to devote a part of each meeting to some phase of this subject."

Another event was the arrival of the scale offered to the Consumer I. Q. winner by the Virginia Weights and Measures Association. Mrs. Clumpner rejoices in being "still a young woman with many years ahead of me in which to use this fine piece of household equipment. And I wouldn't doubt," she adds, "but that it will be used in our family for generations.

"I am a housewife. Sounds so uninteresting, doesn't it?" (We don't think so, Mrs. Clumpner.—Editor's note.) "But it can really be one of the greatest of all professions if one chooses to make it so . . .

"I have been married for 13 years, and we have an 8-year-old son . . . It is my job to be a careful, intelligent buyer so that each year I can set aside a definite sum to be used for travel. 'See America' is our family slogan, and this spring we plan to go to the Golden Gate Exposition in San Francisco.

"Someday we may take our son to visit the Nation's capital and when we do," Mrs. Clumpner promises us, "we shall visit the office of the *Consumers' Guide*."

EXPERTS in fire hazards undoubtedly save more lives than anyone knows. They could save more lives, and more money, if the valuable facts they know could be packed into everybody's kit of knowledge.

An outstanding expert in this field has brought to our attention a chance we had—but muffed—to warn consumers against a serious fire hazard in the home. In our January 16, 1939, issue, we gave our readers a simple chart of facts on how to wage the "Battle Against Bugs." In the section on the house ant, we said that where the nests are in woodwork, a tablespoon of carbon disulphide injected by means of a small syringe would help. We also advised householders bothered by ants to obtain a copy of the Bureau of Entomology's leaflet No. 147 (5 cents from the Superintendent of Documents, Washington, D. C.).

What we failed to do in our chart, but what this leaflet does in italicized type, was to warn our readers that *"carbon disulphide is explosive and inflammable in the presence of fire in any form, so keep matches, lighted cigars, cigarettes, etc., away while using it."* This is a tremendously important warning. If you have saved your copy of the "Battle Against Bugs," be sure to make this note on it. In any case, tuck this fact away permanently in your memory.

SKEPTICS who feel that weights and measures is too difficult a subject to rouse popular interest should get hold of a copy of the latest annual report of the Los Angeles County Department of Weights and Measures.

"A Square Deal For All: The work of the county sealer is to maintain an honest balance between buyer and seller," reads the cover title of the report. Inside is an account of the work of the office written in the informal language all of us consumers speak. And the story is chock-full of lively pictures and sketches.

"The business of housekeeping, presided over by the housewife, involves the expenditure of billions of dollars annually, and, in a sense, represents the largest business in the world," concludes the report. "Be a good shopper. Watch the scale while your purchase is being weighed. When you find that some dealer is making a habit of giving short weight, let us know about it. Your complaint will be confidential, but he will be thoroughly investigated. By doing that, you will not only be a good shopper—but also a good citizen."

TO ANOTHER local weights and measures office, birthday greetings! The Dallas, Texas, Department is about to celebrate its third anniversary on the air, broadcasting educational programs for consumers and businessmen on the value of adequate weights and measures administration.

"We are very happy over the fact that consumers and merchants are showing a better spirit of cooperation than ever before," writes the Chief Sealer of the Bureau, announcing the anniversary.

For 2 years the broadcasts were confined to the local municipal station. "That," the Chief Sealer tells us, "was the first known series of weights and measures education programs on the air, and over the world's oldest municipal radio station."

Last November the program expanded, and the Bureau began its series of broadcasts over a State network. Today 23 different stations carry the Dallas weights and measures story across the Lone Star State.

AN INVESTMENT in economic security is paying dividends.

Only a few years ago the Farm Security Administration began its program of making small loans of a few hundred dollars each to impoverished farm families—"down and outers" left stranded by economic catastrophe or destruction of the land. More than a million farm families at the relief level have received loans to buy needed equipment, and perhaps a mule or a cow to set them on the road to rehabilitation.

The reckoning has been, first, in the improvement of living standards of these families, and, second, in the promptness with which they have repaid loans.

Comparing the economic standing of almost 233,000 of these families now with what it was when they obtained loans, the FSA finds that these families have increased their "aggregate net worth"—over and above all debts—by $61,817,000 since obtaining loans. That is an average increase in "net worth" of over $265 per family.

Each of these families has increased the value of its belongings, farm equipment, home, etc., by more than one-third.

As for payment of loans—over 78 million dollars out of a total of 262 million dollars loaned to 444,000 individual borrowers has already been repaid, although many of the loans do not come due for 4 or 5 years.

From Grass to Cattle to Meat

From Texas to the Canadian border, from the Plains States to the Pacific, the Western Range Program of the Agricultural Adjustment Administration seeks to restore a cover of grass to the scourged earth. For grass will hold the soil, and grass is the source of meat

ONE HUNDRED years ago when the Americans who faced seaward launched clipper ships into the blue ocean, the Americans who faced inland rode Conestoga wagons westward across a sea of green grass. Only plains Indians, buffalo, and game inhabited that vast expanse.

As people crowded the cities of the East, adventurers, speculators, and exploiters saw in the sea of grass, stretching from the Rio Grande to the Canadian border, a vast pasture 1,500 miles long and 1,000 miles wide for the raising of beef cheaply and in quantities the world never dreamed of. By 1884, a million cattle grazed in this vast pasture, moving north from Texas with the summer, watched by 4 thousand cowboys. In the fall the cattle were herded together and shipped East, cheap beef for America and Europe.

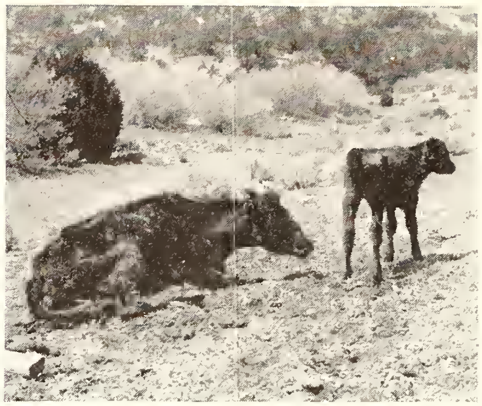
From the East farmers seeking homesteads, from the West ranchmen seeking pastures, moved in. Fences began to cut across the sea of grass. Part of it was fenced off in ranches too small to maintain a family by cattle raising unless the soil was mined. The soil was mined, the land was overgrazed. The grass stopped coming up in years of drought, and the land lay bare to the occasional rains. It eroded.

Part of it was claimed by the States, which rented it to the cattle and sheep raisers with an eye more on revenue from rents than on the value of the range as a natural heritage and an asset of State and Nation. Part of it was held by the National Government itself under the public domain, and also leased for grazing. To get their money back, to make a profit, the sheep and cattle raisers crowded the land with herds. This, and the lack of rain, stripped the land bare. Then the wind and the rain gullied the earth.

Part of the sea of grass was allotted to railroads in alternating sections so that it was almost impossible for one man or one company to obtain a single section of land large enough to support a ranch. Sections were rented for pasture, and renters mined the earth to get rent payments back.

Part of it was properly and intelligently used so that it produced food without depleting the range. But too little of it.

WHEN the wind blows, over-cultivated or over-grazed land goes up in dust. The Range Conservation program of the AAA aims to prevent dust storms like this.



GRASS is the staff of cattle life and the natural resource upon which the livestock industry is based. Eroded, badly used land produces bony, starved cattle.

BUILDING dams on the range prevents water from racing off the land carrying the rich topsoil with it. But building dams is expensive, so the AAA shares the cost with ranchers.

THERE ARE 728 million acres of western land, most of it rangeland.

Today this land can support only half as many cattle and sheep as it could support 100 years ago. Eighty percent of the range area is eroding seriously, decreasing the capacity of the soil, increasing the cost of feeding cattle.

Beef that was formerly shipped to feed the crowded cities of America and Europe comes more expensive for the consumer now. But the return to the producer has not increased.

There are more ways to measure what the erosion of grassland costs the country than by looking in a butcher shop. Dust and rich topsoil from half of the 589 million seriously eroded acres of rangeland are silting up streams, clogging expensive irrigation systems, and turning back more land to desert.

Silt chokes the works of power developments along the western rivers, muddying and spoiling city water supplies, and killing off fish in the streams. Barren lands starve out game. Unrestrained by the grass roots that once held the water in the earth, rains and spring downpours precipitate disastrous floods.

Plows, dry summers, and exploitation were the prelude to dust. When the dust blows, homes are abandoned, communities dry up, and men and women take to their jalopies, as their ancestors took to prairie schooners, and go in search of better fields. But today there are no undeveloped lands to the west and no hope beyond the mountains.

"IT IS hereby recognized," Congress said in the Soil Conservation Act of 1935, "that the wastage of soil and moisture resources of farm, grazing, and forest lands of the Nation, resulting from soil erosion, is a menace to the national welfare, and that it is hereby declared to be the policy of Congress"—to save the soil and restore the grasses.

Seeding and sodding, digging and furrowing, working with the guidance and aid of the Agricultural Adjustment Administration, the men and women on thousands of ranches in more than a dozen States are making grass grow again where too many head of livestock had grazed, where the plow and the cultivator had tried in vain to convert grassland into grainland, where the sun had seared the earth and the wind and rain had peeled it away. Allied with the ranchers and farmers, too, in their fight against a creeping wasteland are the rangers of the Forest Service, the experts of the Soil Conservation Service, and the brigades of young men in the Civilian Conservation Corps. Scientifically directed, they seek to restore grass to land which needs grass for protective cover.

Individual farmers, burdened with debts, are unable by themselves to afford the cost of soil restoration. Theories inherited from the time when America's prodigious wealth in natural resources was still unexploited would say, "If a rancher cannot maintain his land, then let it run down. It's his land."

Today we realize that, while it is his land, he is only the custodian, for after all it is our land. And knowing that the entire Nation will share with the farmers and ranchers the wealth of restored fertility, the Government today shares the cost of rebuilding the soil.

THE NATION'S contribution to the cost of rebuilding the soil on a ranch is called the range-building allowance. This allowance, set up for each ranch by the Government, is based on the size of the ranch and its grazing capacity, which is the number of mature animals it is capable of feeding over a year's time without injury to the range. Rates vary for areas and productivity of the land. Where 75 cents is allowed for each animal unit, 3 cents is set up for each acre in the ranch; where $1 is allowed for the animal unit, the acre rate is 2 cents.

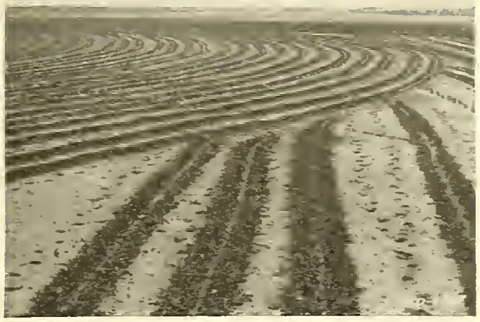
Using the latter rate as an example, suppose a ranch of 1,000 acres is capable of grazing 100 animals. Then the rancher's range-building allowance would be $100—a dollar for each animal capacity—plus $20—2 cents for each acre in the ranch—or $120 altogether. To earn the $120 the rancher must undertake certain range-building practices.

He may decide to keep his cattle off a part of his land from the start of plant growth in the spring to the time of seed maturity in the fall. This will enable the land to reseed and get a start again in growing grass. This soil-conservation practice the AAA calls reseeding land naturally by deferred grazing. If a rancher defers grazing on one-fourth of his land, he can earn 40 percent of his range-building allowance. He may earn 20 percent more for supplemental practices which may be desirable in his community in connection with deferred grazing.

On the other hand, if the range is too far gone for natural reseeding, then artificial seeding—where soil and climatic conditions make it possible—is encouraged. The rancher is reimbursed 20 cents for every pound of seed he sows on his land, up to a maximum allowance of $2 an acre.

In some areas, for planting trees, trees of a kind and age that have been determined to be suitable for his land, the rancher receives $10 an acre.

WEEDS are nature's way of protecting the soil from erosion when grass has been



TO SAVE the range, a national resource, the AAA shares the cost of soil-conservation practices with the Nation's ranchers. Here a rancher is holding onto his soil by contour ploughing.

TREES break the monotony of flat plains. They also hold rain water on the land and act as windbreaks against dust-blowing storms.

THIS picture illustrates the AAA range program too. For successful conservation will mean lower cost meat for consumers, as well as adequate returns to ranchers.

eliminated. But poisonous and noxious weeds are undesirable on a livestock range. The AAA offers a payment for eliminating certain such species where this can be done without reducing vegetative cover in a way that will subject the soil to increased erosion. For example, a rancher may earn $1 per acre for eliminating a heavy infestation of prickly pear or cactus.

Open water, where animals may drink, is the source of life on the range. When water holes are few and badly located, however, thirsty cattle graze off nearby grass while the range farther away carries little of the feeding load. Water holes in greater number, and more strategically located, mean a better distribution of livestock on the range.

The answer to this problem is to build reservoirs, construct dams, excavate seepage spots, and dig wells, so that there will be many oases, and no single water hole will serve as a magnet in any limited area.

For constructing earthen reservoirs or tanks, then, farmers are allowed 15 cents a cubic yard, up to 5,000 cubic yards of earth excavated. Over that amount the rate is 10 cents. For building concrete dams or rubble masonry dams, ranchers are reimbursed $6 for each cubic yard of concrete or earthen masonry used. For digging wells and excavating natural watering places, ranchers receive similar allowances.

Fires are the enemy of grass as well as of forests. To fight fires, ranchers are paid 5 cents for every 100 feet of fire guards they build; that is 5 cents for every 100 feet of land at least 10 feet wide which is stripped clean of vegetation. Such artificial deserts create a wasteland that not even a fire can cross.

Where land slopes are defenseless against rains which run off swiftly and tear away much of the topsoil, contour furrowing and listing can be used to hold rain and snow water on the rangeland where it falls. Ranchers also have the opportunity of constructing spreader dams and spreader terraces as part of the erosion-defeating strategy. The ridges and shallow ditches spread out the moisture; and instead of washing off rapidly, the water seeps slowly into the soil.

For furrowing or listing land on the contour, the AAA pays 50 cents an acre. Ranchers can earn 15 cents a cubic yard of material moved in building dams, and 50 cents for every 100 linear feet of spreader terraces.

BY ADOPTING one or all of these practices, ranchers may earn their range-building allowances. But in no case can they earn more than the allowance determined by the grazing capacity and the size of their ranches. To qualify for allowances, ranchers agree to desist from soil-depleting practices. There's little good restoring one-fourth of a ranch if, in the process, the rancher overgrazes the other three-fourths.

Best assurance that these practices will be undertaken seriously and faithfully is that the rancher puts far more into them than the amount of his range-building allowances.

NO GOVERNMENT can undertake the enormous responsibility of directing the use of millions of acres of land all over the country. Nor is the Government even attempting to do this. Range-building programs, like all AAA programs, are in the hands of the people who own or operate the land; the ranchers themselves, in this case.

When a rancher decides to take part in the program he signs a form indicating that he wants to take part in the work of maintaining and restoring the Nation's soil resources. By this he automatically becomes a member of the County Agricultural Conservation Association, which is made up solely of other ranchers and farmers in his county, who like him have indicated their desire to take part in the soil-conservation program.

From its own ranks the Association elects its representatives to form a county committee. The job of determining what range-building practices are to be adopted in a county is theirs. The job of working with the ranchers to see that the practices they carry out conform to scientific standards, is theirs. The determination of whether or not a particular rancher has earned his allowance is theirs.

Disagreements between an individual rancher and his county committee may be appealed to a State committee which is composed of farmer members just as is the county committee.

As it must be, the job of holding the soil is being done by the men on the soil.

The sea of grass will never again be the vast and luxuriant range it was when Indians and buffalo roamed over it. But with the help the people of the Nation are giving through the AAA program, the grass is being restored. And as the sea of grass grows again, the chances increase for abundant meat supplies at costs which will not ruin the producers of these supplies. For grass is the cheapest source of meat.

o

JUST AS IT IS IMPORTANT *to see that the productive power of our farmers is made available to the people of our cities, so it is important that the tremendous factory facilities and huge unused labor supply of our cities be converted into increased abundance available to our farms.*

Henry A. Wallace,
Secretary of Agriculture

How to Clean Walls

Doing a careful clean-up job can save the expense of new paper or paint. Here are some helps to thrifty homemakers

A ORIENTAL potentates with tapestry-lined palace walls have one domestic advantage over the American housewife. If their walls look smudgy, they merely snap their fingers and, presto!—the tapestries are down and hurried off to the Oriental equivalent of the dry cleaner.

All of which may be so much fantasy, but it has a moral for house cleaners who take one look at walls marred by sticky fingers of 3-year-olds or blackened by a winter session of coal dust, and who promptly begin juggling the family budget to squeeze out a few dollars for a new paint or paper job.

Walls can't be dismantled and whisked off to the nearest laundry, of course. And it wouldn't do much good to spray them with cleaning fluid and let it go at that. But neither do large chunks have to be sliced out of the budget to renew the wall finish every time it gets dirty. From the household remedies of the last generation to the streamlined packages on today's store shelf, the housewife has an array of formulas and preparations to clean painted and papered walls.

FIRST RULE in the wall cleaner's handbook is to dust walls—painted or papered—regularly A soft duster is best. It doesn't scratch, and it gathers dust better than a broom or a stiff-bristle brush. An outing flannel bag on a broom, or a long handled soft hair brush, does the job.

CLEANING WALLS

Applying most of them is largely a matter of following directions. But walls done in fine oils or delicate tints sometimes require the expert touch if streaks and fading are not to be the first result of cleaning. Likewise, a heavily embossed wall paper or one not guaranteed washable might be more damaged than cleaned by ordinary cleaning methods. For these not-so-common cases, the expert advice of an experienced decorator is needed before cleaning methods are decided upon.

For most interiors, the amateur hand may do as efficient a job as the trained one. The methods here described are meant to meet the ordinary house-cleaning problems.

Walls—painted or papered—should be dusted regularly and completely if dirt is not to become imbedded in the finish almost beyond hope of removal. A soft duster is best. It's doesn't scratch and it gathers up the dust quicker than a broom or a stiff-bristle brush. A long-handled soft hair brush will do the job. Just as good is an outing flannel bag on a broom. Wool brushes are expensive and they require a great deal of care to wash and keep clean. If you use a soft cloth or cotton, rotate the wiping surface; then you won't be rubbing on more dirt than you take off.

DOMESTIC experts say the best method for cleaning walls is to begin at the bottom and work up, making a particular point of getting into corners, crevices, and concealed areas—around radiators, for example. Particular care should be taken with wall paper. Hard rubbing can easily mar or injure it. A very even stroke with little pressure won't blur the pattern or spot the paper.

Spot removing, thorough cleaning, and washing of walls require a combination of wisdom and skill.

First, a few tips on painted walls. The wrong way to wash down a painted wall is to take a strong laundry soap or powder, mix up suds and get to work. True, you will remove dirt. But white paints will end up yellowed; and colored paints won't look very much like the original.

The right way is first to make sure that the paint on your walls is washable. If it is an oil paint, and washable, a cloth or sponge wrung out of light suds made with the mildest of soaps or soap powders and rubbed on the wall with even strokes will clean a moderately soiled wall. Mild soap has a very small alkali content. Rinse the wall with a cloth or sponge wrung out of clear water, then wipe dry with a soft cloth.

Bureau of Home Economics experts warn against using coarse scouring powder or strong alkali on paints. A jelly made from a neutral soap is their suggestion. It should be applied with an up and down stroke. The wall should be rinsed with clear water and then dried.

BADLY SOILED painted walls—particularly those of rough plaster—usually respond to a treatment of whiting carefully applied with a cloth moistened with hot water. A small space should be cleaned at a time. Rinse the wall with clear water; use a soft cloth for drying.

If the wall is slightly soiled but needs a complete freshening up, try this solution: 2 tablespoons of mild soap powder, 3 tablespoons of turpentine, and 1 quart of warm water. Dissolve the soap powder in warm water, add turpentine, and stir rapidly. A cloth, sponge, or brush can be used to apply the mixture to the wall. Rinse the wall with clear water and dry.

Enameled walls, one writer has said, should be washed like a dish. This might hold if you use plain water on your dishes. The big thing to remember when cleaning enameled walls is that strong alkaline soap dulls the paint, removes its luster. A woolen or

SUDS made with a mild soap will clean most painted walls if they are only slightly soiled. Coarse scouring powders or strong alkaline soaps are likely to remove the paint along with the dirt.

cotton flannel cloth wrung out of hot water will clean a moderately soiled enamel painted wall. Wipe the wall dry with a soft cloth. Whiting can be used for spots, stains, and dirt that don't yield to ordinary water. But rub the whiting on lightly or you will scratch the paint.

The enamel painted wall that is extremely dirty can be cleaned with any of the solutions already suggested for oil painted walls, or with one of these 3 solutions: (1) one ounce of sal soda in 2 gallons of water; (2) half an ounce of laundry soda in 2 gallons of water; or (3) half an ounce of trisodium phosphate in 2 gallons of water. To protect the gloss take care not to make any of these solutions too strong. A small portion of the wall should be washed at a time, followed by a rinse of clear warm water, then dried with a soft cloth.

You can't clean most calcimined walls. They can be wiped down with a dry, soft cloth, but washing them results in streaks and fading. Cheap in the beginning, they may prove to be more expensive than enamel painted walls because of the necessity of redoing them every time they get a layer of dirt on them.

One point to remember, whatever cleaning formula you choose, is always to rinse with soft water. If the wall is rinsed with hard water or if a thorough job is not done, the result may be streaks, cloudiness, or spots.

COMMERCIAL CLEANERS for painted walls there are aplenty. The "read-the-label" rule should be followed to the letter here. Most common ingredient of the commercial cleaner is trisodium phosphate. Used right, it does an excellent job—but, used wrong it can destroy the finish of a wall completely. It is by no means "foolproof."

Cleaners with sodium metaphosphate (which also softens water) do a good job when combined with a mild soap or soap powder. The chemical dissolves dirt immediately, requires little work, and will not injure the paint.

Sulfated fatty alcohol—a "soapless soap"—comes in a powder or paste form for cleaning walls. One tablespoonful in a gallon of warm water does the job.

To apply any of these solutions, take a large section of the wall at a time. Use a circular motion. Then, after rinsing according to directions, wipe the wall with a turkish towel wrung out in plain water, using a straight up and down motion.

If the luster of the wall is lost in washing, it can be restored by application of liquid wax. This protects paints and makes future cleanings easier.

SOME WALL papers are guaranteed washable; others can be easily ruined by application of moisture.

Washability is one point for the consumer to look for in buying wall paper. A wall paper trade association has recently issued specifications for papers which may bear its seal of approval. Cleansibility is listed as one of the specifications, and all papers carrying this seal "must be cleansible—that is, the surface must resist water so that it may be wiped off with a damp sponge without damaging the color or surface." There is, of course, no official approval or enforcement of the requirements of this manufacturers' guaranty. The commercial standard for wall papers, issued by the National Bureau of Standards, and adopted voluntarily by the trade, does not include a guaranty of washability. However, the wall paper manufacturers realize the importance of such a provision and propose to include it in a revision of the commercial standard now under way.

For papers that are washable, one caution is not to use too much water, as the wall paper will easily soak off. A very mild soap solution, applied carefully to washable heavier wall papers with a soft sponge, will be successful. Dry the wall with a soft cloth after rinsing. On the light washable papers, use a clear lukewarm water with no soap.

Wall papers can also be cleaned fairly successfully with the commercial pastes or powders on the market. An expert can do the job much better than an amateur; in any case, directions should be followed to the letter if spots and streaks are to be avoided. It is always wise to try any such cleaner on the paper behind a picture or a door to be sure the color or pattern won't come off along with the dirt. If it works right, clean one strip of surface at a time, working from top down. Slightly overlap each strip of the paste type cleaner, folding the soiled part under when the cleaner becomes dirty.

YOU can make your own "paste" with ingredients out of the pantry. Here's a tested formula put together by the Louisiana Experiment Station: 2 cups of flour, 1 cup of warm water, 2 tablespoons of salt, 2 tablespoons of kerosene, and 4 tablespoons of household ammonia. Mix them all together, then cook in a double boiler over boiling water until the paste no longer sticks to your hand when rolled between the fingers. Cool in a covered pan. Use on one strip of paper at a time by rubbing in only one direction and folding the dough over as its surface becomes soiled. Overlap each strip cleaned so that streaks will be avoided.

You can get other formulas for homemade

[Concluded on page 14]

DEBTOR AND CREDITOR.

Remedial Loan Societies

Crusades against the loan sharks brought forth these semiphilanthropic lenders. Consumers who need to borrow may find some of them useful today

ANNUAL INCOME twenty pounds, annual expenditures nineteen, result happiness. Annual income twenty pounds, annual expenditures twenty pounds ought and six, result misery."

So Charles Dickens had Mr. Micawber in *David Copperfield* say 90 years ago, and it seemed a reasonable thing to say.

It might still be true today, if things could have stood still. But an industrial revolution has intervened, a movement of a great Nation's population to the cities, cycles of business ebb and flow, an exchange of a spare independence for an inevitably greater interdependence of man upon man, man upon business, and both upon complex economic process.

It was a change which came swiftly in this country. A change which a man now living could have seen in his own lifetime. In Wisconsin, a committee of the State Legislature, investigating credit for consumers a few years ago, mused aloud about it in one of those very human documents which official bodies sometimes produce: "Most of the members of the Committee, being men of middle age, recall that in their boyhood the pioneer family was nearly self-sustaining . . . Today, however, it appears that cash is required . . . Society, while making considerable advance in social legislation, has failed to provide families with any regularity of income or with any insurance against catastrophe, while their ability to raise their own food or manufacture their own equipment has almost disappeared."

One result of the flocking to the cities, and the loss of economic self-sufficiency, was the loan shark. He preyed mostly on wage earners. He came into prominence—one of the city's hazards—during the 1880's and 1890's. He charged outrageously, and he collected cruelly. But he was able to do that only because he appeared to fill a genuine need for people—for workers who had to eat, or pay a doctor bill, between now and the next pay day; for small business people or professional men who needed a bit of ready cash to start in trade, or to carry on till business picked up.

Crusaders crusaded, and moralists moralized, but it abated little of the victim's interest charges. If he could have found cheaper credit somewhere, he would have gone there. But he couldn't, and so he went to the loan shark. A legal campaign might drive some sharks out of business (maybe to another State), and drive others under cover. Still the problem was: Where else, when credit was needed, was it to be had? The pawnbroker was about the one other available lender, and he not only required some valuable to pawn, but charged a pretty stiff rate of interest too.

"Periodic campaigns with spectacular criminal prosecutions," a New York official said, "proved as futile as pulling weeds out of a neglected potato patch. In the whole history of campaigns against loan sharks, the only permanent good has come from the development of new institutions to make cheaper money available to the ordinary worker."

How was cheaper money to be made available to those who had to borrow to live? Reformers who looked abroad saw an interesting sight. In Europe there were municipal and State pawnshops lending money at reasonable rates to the average fellow and his family. More looking took the reformers down the perspective of centuries, back to the fourteenth century, when these semicharitable pawnshops had been originated in Italy, by an order of friars.

In France, they still call them *monts de piété*—funds of piety. It is now the Government which assumes responsibility for these funds. It is less of piety, probably, than a feeling that it is cheaper for the community to make credit available to some of its hard-pressed citizens than to have them ground down by money-lenders.

Widespread as were the public pawnshops on the European continent, however, there seemed no immediate possibility of fitting them into the constitutional scheme of the United States. The Federal Government had staked farmers to homesteads on easy terms; and it was later to grant reasonable credit to help farmers climb from tenancy to ownership, from poverty-stricken farming to efficient and self-respecting farming. But around 1900, when the battle against the loan sharks was beginning to rage in many an American city, there seemed no point in talking Government credit for city folks.

It was then that a new type of loan agency came into being. To the moral fervor of the anti-loan-shark crusade was added a big practical argument—funds to loan to those who might have been prey of the sharks.

STATES cannot legislate equality of bargaining power between the needy consumer and the lender. But the pendulum has swung a good part of the way back since the time creditors could put delinquent debtors in jail.

Worthy citizens with some capital to spare got together. In a number of cities they set up what were known as remedial loan societies. Some who furnished capital expected to get interest on it; some did not. Some thought they might forego any returns on their money for a few years, but figured that after a while the societies would have to pay interest or else they would not get any more cash to lend.

Some of the remedial loan societies followed the system of the *monts de piété,* and loaned on pledges. They were, in other words, semiphilanthropic pawnshops. Other societies loaned on chattel mortgages—chiefly on household goods.

Interest rates at the remedial societies were lower than those of pawnshops, and much lower than those of the loan sharks. Business ethics of the remedials were higher.

GREATEST activity in remedial loan societies came during the 1890's and the early 1900's, when the fight against the loan sharks was getting under way. The remedials served as yardsticks of the new small loan business. They showed there was a demand for small loans which would require much more capital than semiphilanthropic sources could supply. They indicated the need for special small loan legislation. Finally, they gave some idea of the costs of the business. They showed that, while lending at bank rates—the cherished "6 percent"—was out of the question, the small loan business might be profitable at rates well below those of the loan sharks. By 1915 there were 38 remedial associations in business. But by that time a number of new forms of credit for consumers had begun to make their appearance.

Credit unions, first chartered in Massachusetts in 1909, showed that consumers might organize and cooperatively meet their need for small loans out of their own savings. Their rates were about the lowest at which small sums could be loaned. "Industrial" banks began to make their appearance just about this time, lending at rates higher than those of credit unions, but far below those of loan sharks, and lower than those of most pawnbrokers. And State legislation made possible the development of a licensed small loan business, charging somewhat more than the industrial banks, but demanding less by way of security.

These new agencies took the starch out of the remedial society movement. Some of the remedials, in fact, metamorphosed into profitable small loan businesses. No new remedial societies were founded after 1917.

Today the remedials' national association lists 22 societies. Fourteen of them lend only on pledges, or on pledges as well as on other collateral. The other remedials take mortgages on cars, or household furniture, or ask cosigners (most difficult form of security for the average consumer to get).

The remedials generally pay limited dividends, usually between 6 and 8 percent. The country's largest society, for example, has been paying, on capital contributed, 6 percent a year every year for 44 years.

Interest rates charged by the remedial societies range from 9 to 36 percent a year. Lowest rate in the country is that of one New York society, which charges three-fourths of 1 percent a month, or 9 percent a year.

THIS society, which does the largest business of lending on pledges of personal goods of any organization in the world, illustrates the need which may be filled by the remedial societies at their best. Since regular pawnshops are notoriously reticent about the details of their business, the reports of this vast society's business throw light on the whole pledge lending picture.

Last year, at the 21 offices of this remedial loan society in New York, 730,000 borrowers received a total of 36 million dollars in loans.

WAGE EARNERS out of a job, or people in need of some quick cash to meet a doctor's or a hospital bill, are the most frequent borrowers from remedial loan societies. But among the remedials' customers are to be found consumers of all occupations, and even small tradesmen looking for capital to carry on business.

Some 202,000 loans last year were made to people who borrowed less than $10. On these loans, of course, the organization lost money. Maintenance of the society's usual rate of return on its capital, however, indicates that low-interest lending on pledges is commercially feasible, especially when sufficient volume is obtained.

Seven out of each 10 loans were for less than $50. At that, this society made 32,500 loans for $200 or over.

Borrowers from this organization may pay back by instalments. Instalment payments may be as large and as frequent as the borrower can afford. The society, however, does not attempt to work out any schedule of instalment repayment with borrowers. On the other hand, it requires, ordinarily, that borrowers pay back at least 5 percent on their loans each year if they want to keep the right of redeeming their pledges.

TOTAL loans by the country's 22 remedial associations last year came to 55 million dollars. Consumers in 21 cities made over a million loans from remedial offices. But the single organization in New York accounted for two-thirds of the activity of all the country's remedial loan companies.

Some remedial societies, founded in the flush of anti-loan-shark campaigns, have gone out of business. A few have stepped out of their limited dividend character. Some appear to be too stodgy and unaccommodating in their business methods, too conservative in granting loans, to help many of the consumers who most need their services.

In a city where a remedial loan organization operates and lends on pledges, the consumer who is thinking of pawning valuables for quick cash, should shop around at the remedial. In other communities, a remedial society may offer an alternative to a small loan company or industrial bank.

At any rate, the alert consumer (and alert consumers must often borrow) will consider this along with other sources of cash-in-a-hurry. He should compare the remedial loan office's interest rate, security demanded, possibility of redeeming the pledge (if that is the security) and terms of repayment; against terms and charges at other sources of ready cash.

The next article in this *Guide* series on credit will take consumers into the personal loan departments of commercial banks.

Previous articles in this series on consumer credit have appeared in the January 30, February 13, February 27, March 13, March 27, and April 15, 1939, issues of the *Guide.*

"The Congress shall have power . . . (to) fix the standards of weights and measures"

Constitution of the United States, Article I, Section 8, paragraph 5.

WHEN is a standard not a standard? The answer is: "When it's one of 48 State standards, many of which are different." Then it's a trade barrier. And it is a Grade A nuisance, to boot, when, in addition to being different from State to State, it is enforced with a disregard for the convenience of interstate traders.

September 17, 1787, was the day on which representatives of 12 of the 13 States (Rhode Island dissenting) put their signatures at the end of a newly drafted Constitution. In the Constitution they gave a newly created Congress power to act on a grievance which annoyed them as much as it does us—the lack of a single standard of weights and measures throughout the United States. Since then the standards problem has been aggravated by the creation of different standards in the different States. This is true not only of weights and measures but also of containers, grades, and a host of other measures of one kind or another.

DESPITE its power to act, the Nation as a whole has done little about the problem. So far as fruits and vegetables are concerned, there are 4 laws which together touch on the problem. There are a Federal Standard Barrel Act, 2 Standard Container Acts, and a clause in the Tariff Act which establishes 50 pounds as the legal weight for a bushel of apples for tariff purposes. Together they fix standards for barrels, berry boxes and baskets, for hampers, round stave baskets, market baskets, and for a bushel of apples. They do not do anything for crates and boxes. Nor do they establish standard weights for bushels, or any of the other units of weight or measure.

Besides these weights and measures laws there are Federal laws which provide for U. S. grades and their compulsory use for wheat, cotton, and butter under certain conditions.

BUT it is not so much what the Federal Government has not done as it is what the States have done, that makes a bewildering problem of nonconformity. This is brought out in the special report of the Bureau of Agricultural Economics to the Secretary of Agriculture on "Barriers to Internal Trade in Farm Products."

Sweetpotatoes, legally, weigh 60 pounds to the bushel in one State, 56 pounds in 5 States, 55 pounds in 5 other States, 54 pounds in 10 States, 50 pounds in 14 States, and 46 pounds in one State.

Cantaloups may come in halves filled with ice cream at the end of a dinner, but when they start on their way to consumers they travel in "standard" cantaloup crates—or rather in crates that have been standardized into distinctly different shapes and sizes by 15 different State laws. Five of these State laws apply standards for cantaloup crates according to the inside dimensions; others define standards according to the outside dimensions. Apple boxes have been "standardized" into a Babel of diversity by 7 different laws.

Most of these standards are voluntary and are intended only for shipments out of a State and not for application at the receiving end of the fruit and vegetable haul.

Not so long ago, however, Oregon made its berry box standards compulsory on all berries shipped out of the State. At the same time California enforced its own different standard for boxes containing berries coming into the State. Oregon farmers and

---

**Fourth of a series of articles giving results of an analysis of "Barriers to Internal Trade in Farm Products," a Special Report recently made by the Bureau of Agricultural Economics to the Secretary of Agriculture. Earlier chapters appeared in the March 13, March 27, and May 1, 1939, issues of Consumers' Guide. A few free copies of the complete report can be had by addressing the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C.*

Standardizing Standards

*When measurements of quantity and quality vary from State to State, standards need standardizing. In the fourth article of a series on trade barriers, the part unstandardized standards play in slowing up trade is shown**

shippers who sold their berries in California were caught between the devil and the deep blue sea.

ANOTHER container problem is packed full of potentialities for trouble. Utah and Montana demand that all fruits and vegetables be shipped in new, clean containers. Arizona says they must be packed in new *or* clean containers if they come with an inspection certificate. To make the law even more stringent, Montana has ruled that boxes which have been used during the picking of fruits and vegetables are not new containers.

Breaking an old farm habit of using baskets, crates, and boxes over and over again, these laws make trouble for farmers, and add to the cost of marketing. Based partly on the belief that there is danger in spreading plant diseases from the use of used containers, the laws have been passed despite the fact that experts have not made up their minds on this problem yet.

MANY producers and consumers now recognize that quality as well as quantity must be measured in order to buy intelligently. Just as with quantity standards, when quality standards vary from State to State, confusion sets in.

Montana requires all produce sold within its borders to bear grades and labels that meet Montana's specifications. These grades and labels are based on Federal standards but they have several requirements of their own.

An official in a neighboring State says, "On commodities such as peaches and cantaloups which are marked according to (our standards) in this State, they (Montana) insist that the grades be marked according to their standards. This, of course, requires a duplication of the marking and causes considerable confusion to truckers hauling into (Montana)."

Consumers, as well as producers, of course, pay the costs of confusion. "It is my understanding," another State official says, "that when a load of fruits or vegetables arrives at the Montana State line, even though they carry the inspection certificates of (our) State, issued under our joint Federal and State setup, they must again be reinspected . . . (and) another charge made for the inspection by the Montana people."

California has established minimum standards for 30 different fruits and vegetables. No fruits and vegetables, from California or from other States, may be sold in the State if they do not come up to these minimum standards.

WHEN minimum standards are fixed at reasonable levels, and usually they are, they protect consumers from inferior and unwholesome products, and they protect the producers of wholesome quality products from unfair competition with inferior products. When fixed at unreasonably high levels, however, minimum standards may reduce the supplies of good wholesome foods to consumers.

Sometimes States take in their welcome mats altogether. Michigan locks and bars its door to cull potatoes, the very lowest grade, if they are to be sold for table use. Colorado rejects all eggs which grade as low as U. S. Trade. State inspectors meet all trucks carrying fruits and vegetables into Utah; any product which falls into the cull class is rejected. An inspection fee ranging from 50 cents to $4 is exacted from each trucker, whether his cargo is admitted or not.

Sometimes States frankly draw up their grade requirements to encourage the sale of their own products and to discourage the sale of out-of-State products.

Rhode Island, for instance, has 3 egg grades—Rhode Island Special, fresh eggs, and eggs that are not fresh. "Consumers desiring the very best egg obtainable," the Rhode Island Bureau of Markets explains, "should demand a 'Rhode Island Special.' This is the highest grade of egg sold in Rhode Island. 'Rhode Island Specials' must be produced in Rhode Island."

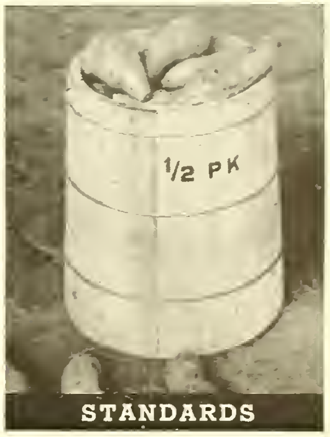
WITHOUT tampering with grade requirements, some States encourage their citizens to give preference to State-grown products by requiring labels which identify out-of-State products. North Carolina, South Carolina, and Florida require eggs that come from outside the State to be labeled "shipped." Georgia and Montana require eggs to be labeled with the name of the State in which they were produced. In North Carolina, South Carolina, and Florida, too, locally produced eggs are labeled as a State product.

Grade requirements that give advantages to State-grown products sometimes are followed by State-sponsored advertisements of the home product.

STATE advertising has not proved an unmitigated benefit to consumers. When designed to encourage the consumption of locally grown products, as against out-of-State products, State advertisements can act like a tariff, discouraging consumers from buying out-of-State products even though they may be equal in value to locally produced foods. "Eat Michigan apples. They're best," that State tells its citizens. "New Jersey has finer eggs," affirms that Commonwealth.

"There is," the Report to the Secretary of Agriculture warns further, "a real possibility that the various States will adopt the view that advertising by other States jeopardizes their markets. In fact, just such a fear is expressed in the introductory section of the Idaho law that provides for State advertising."

Such an attitude obviously can lead to competitive advertising budgets and the develop-



STANDARDS

ment of un-American tensions and rivalries between States.

Even where advertising is within the legal power of a State, the Report to the Secretary says, "each State has the responsibility of avoiding action that . . . would be directly or indirectly restrictive of interstate trade."

This story opened with a riddle. Farmers, distributors, and consumers still have the same riddle to answer which the Founding Fathers thought they had answered by establishing a more perfect union.

THE 13 COLONIES were threatening to become 13 little countries when the Constitution was written. Different kinds of money, different laws, different weights and measures standards, tariffs, blocked the way to progress and prosperity.

Today walls between the States are being bricked up again with different bricks. And as they go up, prices go up with them, and farmers' returns and wages go down. Anything which Balkanizes America tends to Balkanize the American standard of living.

Now the general answer to most of these problems is indicated in the Special Report to the Secretary of Agriculture. States must assume the responsibility of subordinating their "individual welfare to the general welfare of the United States."

For specific recommendations it is necessary to look at the history of grades. When grades were first promulgated, "they were little more than part of the advertising of the organization or district which then issued them . . . Local pride said: 'We will never suffer our unparalleled fruit to be packed and sold on any such low standards as must be set to meet the needs of the growers in yonder Valley over the Divide, where they have multitudes of pests which to us are happily unknown.' "

But while the people in Happy Valley may have wanted a grade designation which would truly bespeak the virtues of Happy Valley fruits, buyers and sellers wanted grades that would speak in a language that could be understood in every market in the country. When counters between buyers and sellers became 3,000 miles wide, it became necessary to speak a language that could be understood 3,000 miles away. Uniform grades and standards provide that language.

The War accelerated the adoption of national standards. But post-war competition between the States threatens to reduce the common language to a confusion of tongues.

WHAT is needed specifically, the Report to the Secretary indicates, is action by the Federal Government under the powers given it by the weights and measures clause in the Constitution, and cooperation between the States and the Federal Government to achieve uniformity in grades, labeling, and standards.

Grades should be extended to more commodities.

Where private brands are used by canners and meat packers to connote quality (and they are universally) an attempt should be made to bring order out of that confusion by the introduction of simple uniform grades.

Grades are expressed in too many different ways; consumers, too, should be able to understand them. Some retail grades are expressed in letters, A, B, or C; some have names, Choice, Extra, Prime; and still others are designated numerically, like 92 score. Instead of all this, the Report suggests, one simple set of grade designations should be adopted. Milk, for example, could stand a uniform grade.

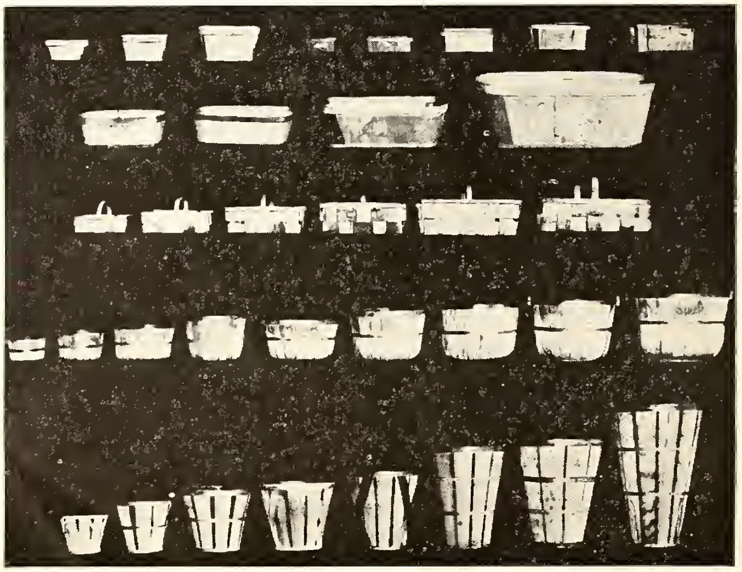
FINALLY Federal and State grades should be studied to see if they keep pace with consumer tastes, and with scientific knowledge. Nor should they smell too much of the laboratory and the study. "In the past Federal and State grades have been criticized on the grounds that they have been written mainly by technical commodity experts without enough consultation with general economists, nutrition experts, and others." The others, of course, are consumers, and farmers, and the trade.

CONTAINERS FOR FRUITS AND VEGETABLES, a new publication of the Bureau of Agricultural Economics, is just off the press. It includes a digest of Federal laws dealing with fruit and vegetable packages, and reviews the containers used in important shipping regions for the major kinds of these foods. It is Farmers' Bulletin 1821.

Copies can be obtained free, as long as the supply lasts, from the Department of Agriculture, Washington, D. C.

THIS DESIGN in consumer confusion explains why consumers have a hard time getting their money's worth when they buy canned goods. Last year they had to select their best buys from more than 155 can sizes, some of which look alike and contain different amounts of food, and some of which look different but contain the same amounts of food.

THE CONSTITUTION gives Congress the power to standardize containers. Acting under this authority, Congress has standardized certain fruit and vegetable containers—reducing the number of berry boxes from 44 to 3; splint or market baskets from 40 to 6; hampers from 75 to 9.



COOPERATION

"**ORGANIZING** a Farmers' Cooperative" is the subject of a Farm Credit Administration circular recently off the press. Concerned chiefly with organization of farm producers for marketing activities, it also carries information which may be of use to farmers interested in formation of cooperative purchasing groups or the cooperative provision of business services.

Practical advice on forming the association—after it has been decided there is need for it, and that it can be supported—is followed by suggested organization agreements, marketing agreements, and bylaws for the co-op.

This 42-page booklet, listed as Circular No. C–108, is free from the Farm Credit Administration, Washington, D. C.

THE EXTENT of cooperative activity among the farmers of America is marshaled statistically in a current Farm Credit Administration leaflet, "Statistics of Farmers' Marketing and Purchasing Cooperatives, for the 1937–38 Marketing Season." (Free on request from the Farm Credit Administration, Washington, D. C.)

Growth of marketing and purchasing co-ops in the last 10 years emerges vividly from the rows of figures. Cooperative purchasing associations, for example, more than doubled in the 10-year period, with 2,600 listed for last year, as compared with 1,205 in the 1927–28 season. Membership, it is estimated, went from 398,000 to about 900,000. Total purchases were recorded at 128 million dollars for the 1927–28 season and 323 million dollars last year. In addition, marketing associations last year did 117 million dollars' worth of purchasing for their members. Thus purchasing activities of farm co-ops last year totaled 440 million dollars.

Through the 2,600 purchasing co-ops reporting for 1937–38 in this annual survey, farmers in 46 States were buying chiefly feed, petroleum products, fertilizer, seed, coal, and machinery.

NORTH CAROLINA hog raisers are finding cooperative swine markets a road to better grades, better marketing practices, and better prices, according to a recent report by the State College Extension Service. Fourteen of the 16 associations in North Carolina have been formed since the first of January, 1937.

In the eastern part of the State, cooperative swine markets sold close to 95,000 hogs last year for a total return of 1½ million dollars. Not only that, but, says the Extension Service swine specialist, these cooperatives "enabled the farmers to determine whether the price they received from other sources was a fair one."

BUYING CLUBS among locals of the Farmers' Union in Louisiana are said to be growing. Started only a few months ago, about a dozen clubs are now taking orders, and combining them to pass on savings to their members in a number of grocery items. The savings, writes the Louisiana Farmers' Union, "remain in the local treasury until after the third monthly order has been filled. At that time the members vote what percent of the savings are to be turned back to each member, and what percent will be set aside toward their own cooperative store."

Cooperative purchasing of fertilizer is reported by Farmers' Union members in other parts of the State.

HOUSING is one field of cooperative activity which has been much less prominent in this country than in a number of European lands. Present housing cooperatives include several well-established institutions serving several thousand families. But until recently cooperation in housing has been almost entirely restricted to the New York City region.

Public housing construction, on the other hand, has been concerned almost entirely with homes for very low-income families, those just a step above the relief level.

The National Public Housing Conference has recently proposed that Federal, State, and local authorities aid cooperative tenant societies in "the erection and management of dwellings for their own members, under the supervision of local housing authorities." No subsidies or grants would be involved in the Conference proposal. But the necessary capital, it was suggested, should be loaned at moderate interest rates to the cooperative groups.

Families to be served would be those whose incomes are not high enough for them to rent decent homes at prevailing rates, but too high to make them eligible for present Government-aided houses and apartments.

COOPERATORS AND STUDENTS of consumer organization are almost accustomed to being periodically staggered by statistics from the vast British cooperative movement. Latest figures to dazzle American readers' eyes are the London Cooperative Society's results of its fifteenth annual one-month membership campaign.

Enrolling almost 45,000 members in the one-month drive, the London Society—and it is only one of the 3 cooperative societies in the city of London—pulled its total membership figures up to 804,850. It thus easily boasts that it is "the world's largest retail cooperative."

With 998 retail stores, and a total business last year of almost 78 million dollars, the London Cooperative Society distributed patronage refunds to its members of over 4½ million dollars. It is the largest distributor of milk and coal in the metropolis.

One of the other 3 societies in London, the Royal Arsenal Society, recently announced that it had furnished its members and its other patrons with almost 51 million dollars' worth of goods and services last year, and returned 3½ million dollars in savings to members.

THE COOPERATIVE MUTUAL automobile insurance company originally launched by the Ohio Farm Bureau maintained its position, fifth from the top among mutual auto casualty companies, last year. Six million dollars' worth of premiums were written during the year, an increase of 40 percent over 1937 activity. At present the company still operates in only 9 States and the District of Columbia.

[*Continued on page 14*]

THE WORKER who is beyond the age of 40 or 45 frequently lands on the industrial scrap heap. In the competition for jobs he is at a grave disadvantage, sometimes because of the effects of age but often because of the employer's preference for a younger man, regardless of the skill or vigor of a middle aged or older worker. Many public and private agencies have been occupied with the problem of the older worker. The problem has become all the more serious because the proportion of people of 45 and over in our population has been rising steadily.

Self-help cooperatives are now suggested as a means of enabling the community to care for some of its older, and otherwise permanently unemployed, workers. A detailed study of self-help cooperatives was made in Los Angeles under the auspices of the Social Science Research Council and the University of California.

"The self-help organizations," says the report, "are capable of producing even larger savings than they have produced in the past if they are directed to providing a self-sustaining means of livelihood to the thousands of persons who are every year reaching the age of 'obsolescence.' " Even from the standpoint of "relieving the already overburdened taxpayers," it is concluded that "the community can ill afford not to support the self-help organizations."

In the self-help co-ops, "the members organize and conduct their own activities, supervise and deal with other workers, and make and dispose of goods according to their own judgment."

Recommendations of the study are that self-help organizations should be encouraged and aided, by Federal, State, and local authorities, to continue their work and improve their procedures. These authorities, moreover, are urged to "collaborate in a program of education in cooperation, not only for the members of the self-help organizations and those interested in them, but also for the public in general. Both should be instructed to regard self-help as an agency supplementary to the present-day economy, rather than as a movement in opposition to it."

COOPERATIVES as a way toward higher living standards for the South were discussed by the recent Conference on Cooperation at Greenville, South Carolina. Among sponsors of the conference were the University of North Carolina Extension Division and the Greenville County Council for Community Development. "Educating People to Help Themselves" was the theme of the 3 days of discussion. Taking part were some 300 people from 10 Southern States, representing churches, labor unions, universities and schools, Government, farm cooperatives.

Specific recommendations of the conference included preparation of a directory of local cooperatives already functioning in the South; development of courses on cooperation for schools and adult education groups; organization of credit unions, buying clubs, and other types of co-ops.

DELEGATES to the twenty-second annual meeting of America's oldest cooperative wholesale, with headquarters at Superior, Wisconsin, voted to hire resident education directors in each of the 7 districts in the wholesale's territory. The appointment of these educational directors was seen by the meeting as stimulating the action of cooperatives in defense of democratic institutions. Represented at the meeting were 160 co-ops in Minnesota, Wisconsin, and Michigan, with 35,000 members.

Business for the wholesale last year passed the 3 million dollar mark. The delegates voted patronage refunds to member societies of 1.4 percent on wholesale operations, and transferred the rest of the $65,000 net saving to surplus reserves.

AN EASTERN CONSUMER cooperative wholesale reported, at its recent annual meeting, an increase in business from 537 thousand dollars in 1937 to 717 thousand dollars last year. Goal for 1939, the 350 delegates from 12 States were informed, is a million dollar volume. Monthly figures of sales to May, it was said, bear out the expectation that the goal will be reached.

A testing kitchen, said to be the first of its kind operated by a consumer co-op wholesale, was one of the highlights of the delegates' visit to the wholesale's enlarged headquarters in New York City. In the first 7 months of its operation, this "housewife's laboratory" has tested 1,225 different grocery items.

SPRING is convention season. Another significant cooperative meeting brought together 500 delegates from consumer co-ops, mostly in cities in Illinois, Indiana, Ohio, and Southern Michigan. This was a joint annual meeting for the educational league and the cooperative wholesale serving 12,500 members of 110 cooperative societies in the Central States.

Growth of cooperatives in the Columbus, Cleveland, Detroit, and Chicago regions was reported. Delegates, in line with what appears to be a distinct trend in the consumer cooperative movement, voted to develop plans for unification of the educational league and the wholesale into a single coordinated regional organization.

PROBLEMS OF YOUTH under current economic conditions occupied delegates to the regional annual cooperative youth conference at Superior, Wisconsin. Over 200 delegates and visitors from the Lake Superior area took part in discussions, business meetings, and skits. A new wrinkle in co-op youth meetings was a broadcast interview of delegates from the convention stage.

THE COUNTRY'S first consumer cooperative-owned refinery, it is announced, will soon be built at Phillipsburg, Kansas. A 70-mile gathering pipe line will connect the plant with nearby Kansas oil fields.

The refinery is to be a subsidiary of a mid-Western co-op wholesale whose members are 440 local consumer cooperatives. Last year these societies bought over $4,280,000 worth of gas, oil, farm supplies, and groceries through the wholesale. It is expected that these societies will be able to get about 40 percent of the refined fuel they sell from the refinery. The wholesale has been operating its own oil-blending plant.

HOW TO CLEAN WALLS

[*Concluded from page 7*]

wall paper cleaners by writing for circular 183, Pennsylvania State College, School of Agriculture and Experiment Station, Division of Agricultural Extension, State College, Pennsylvania.

Soft stale bread is a favorite household remedy for soiled wall paper. The scratchy crust of the stale bread is cut away, and a fresh part of the loaf used as fast as it soils. Rub the bread over the wall in long, even, vertical strokes. And don't press too hard on the wall.

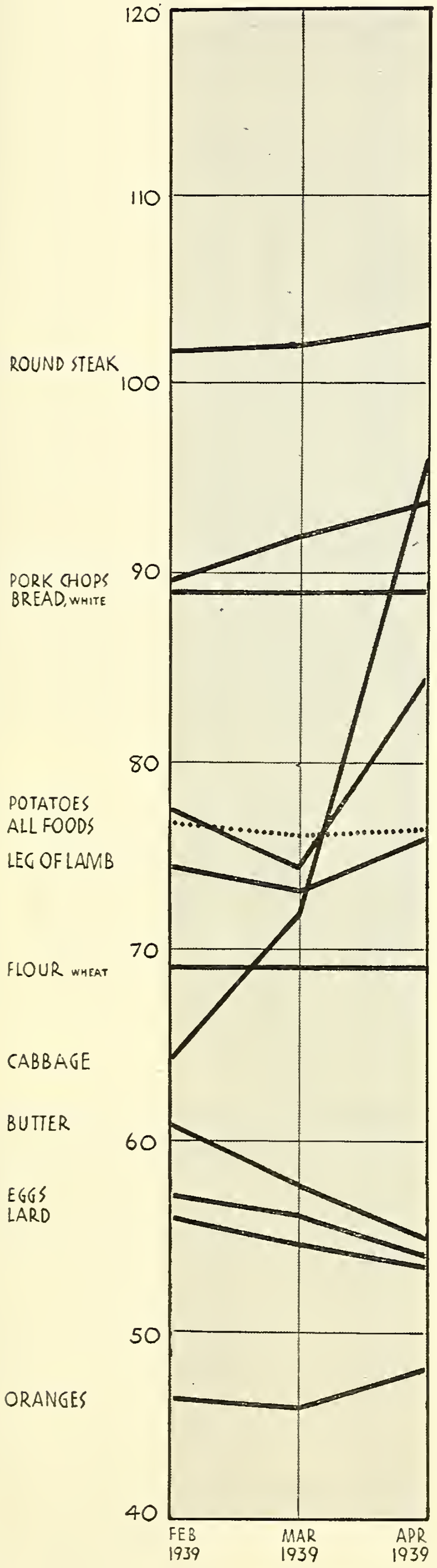
Fresh grease spots—from oily hair, for example—usually come off if a hot iron is pressed against a blotter held against the spot. Two or three applications may be necessary before the spot melts off, but too persistent an ironing can scorch the wall.

Another way to get rid of grease spots is to apply a thick layer of fuller's earth, or talcum powder. Left on the spot for 24 hours, and then lightly brushed off, either of these may get rid of the blemish.

A bad stain can be treated with ordinary household hydrogen peroxide (3 percent). But this may change the color of the paper slightly, so try it on a hidden spot behind a picture before you decide to use it.

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE



FOOD COSTS: Downward trend which has been underway since last December was checked in April, when costs went up slightly. This increase resulted from an upturn in prices of cabbage, potatoes, and meats which more than offset seasonal decreases in prices of eggs and dairy products. Costs, however, continued at the lowest level for this time of the year since 1934. They are 3.5 percent below last April.

FRUITS: Good crops of pears, grapes, and cherries are in prospect this spring and summer. Peach supplies through July probably will be slightly larger than a year ago.

MELONS: June supplies of cantaloups and watermelons most likely will be slightly smaller than in 1938, but sharply below average.

VEGETABLES: Spring and early summer supplies (not including local truck garden supplies) probably will be about average this year. No production data are available on local truck gardens, which are an important source of supply at this time of the year.

DAIRY PRODUCTS: The 1939 peak in milk production, which usually comes in June, may be above its 1938 level in view of record production in recent months.

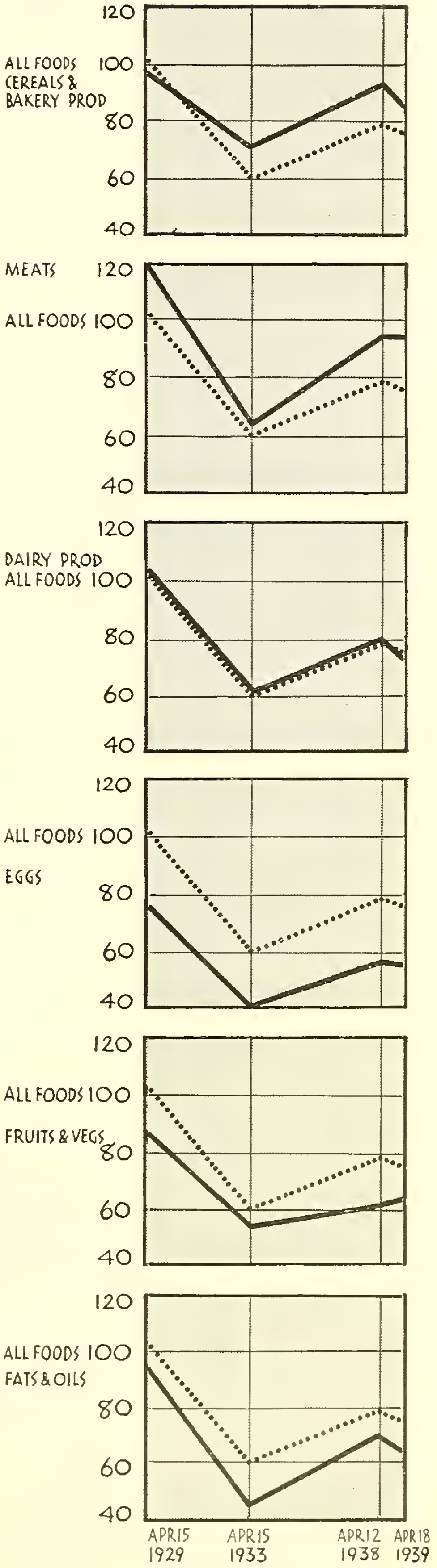
EGGS: Peak in production appears to have been reached in April. A seasonal monthly decrease in supplies, but supplies larger than in 1938, is in prospect from now until November.

POULTRY: Seasonal increase in supplies of young chickens (broilers, fryers) and much larger supplies than a year ago are in prospect for June.

CANNED VEGETABLES: Total supplies for the 1939–40 season (which opens in August) probably will be slightly smaller than for the current season. A prospective large carryover at the end of this season is expected to offset in part the effect of a much smaller pack.

MEATS: June supplies of better grade beef, pork, and spring lamb probably will be above their May levels. Spring lamb and lower grade beef are the only meats that are expected to be less plentiful than last June.

A CLOSE-UP



IN THIS ISSUE

MAY 15 1939 ● VOLUME VI, NUMBER 3

From Grass to Cattle to Meat 3
How to Clean Walls 6
Remedial Loan Societies 8
Standardizing Standards 11
Cooperation 13
Your Food Supplies and Costs 15

U. S. GOVERNMENT PRINTING OFFICE 150570

R
1.94
Ad42re

U. S. F. S. RECEIVED
LIBRARY
JUL 26 1939

HEALTH SECURITY

CONSUMERS' GUIDE

JUNE 1939

CONFERENCE

ICE CREAM

CONSUMER FRONT

FOOD BILL

CONSUMERS' GUIDE

JUNE 1939 VOLUME VI, NUMBER 4

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

DIG OUT your dictionary and see if you can find out what "purchasing power" means. Chances are you won't find it defined there. Yet this phrase is used probably more often than any other these days when people get together to talk about what's wrong with America. Most people seem agreed that we haven't got enough of it. The women who came to talk with Secretary Wallace—see page 6—thought we needed more of it. Few people stop to define it.

Some people think more "purchasing power" means more money. Others think it means a larger pay check. Actually it means greater ability to buy goods and services—and that takes into account not only the money you have to spend but also the cost of goods and services that you spend it for.

Having a bigger purchasing power is more important than having a bigger income. You can't eat dollar bills, or make suits out of them, or live under them so that the rain doesn't hit you or the sun doesn't strike you. But you can eat and wear and live in things that dollars will buy. If your purchasing power goes up—that is, if your ability to buy the thing you want goes up—you are definitely ahead in the game.

When the Congress passed the Agricultural Adjustment Act it recognized the difference between having a bigger income and having a bigger purchasing power. In the A. A. Act, it said: We want farm families to have—not just a bigger income, not just higher prices — but a bigger purchasing power.

There are two ways to get a bigger purchasing power: One is to have your income step up faster than the cost of the things you buy; another is to know how to spend the money you have so that you get more for it.

AAA is hard at work trying to aid farmers in building up their purchasing power both ways. By helping farmers to plan their production and marketing, by helping them to conserve the source of their income, it is giving them a hand in increasing their money income. By telling farm families how to buy wisely and economically, as in the *Consumers' Guide,* it is giving them a hand in getting the greatest possible satisfaction from the spending of their income. Both services go hand in hand.

PUSHING AHEAD its experiment in better nutrition for relief families, the Federal Surplus Commodities Corporation put the "stamp plan" into operation in Dayton, Ohio, on June 1. (For a description of this plan, see *Consumers' Guide* for April 15, 1939.)

This is the second city to be chosen as proving ground for the Government's new effort to move surplus foods from the farms, through regular distribution channels, and into the hands of people whose incomes are too small to purchase safe diets. The first city was Rochester, New York.

Two methods of distributing surplus food order stamps are being used in Dayton. One group of people—those at work on WPA projects, those receiving or eligible to receive public assistance such as old age pensions, aid to children, aid to the blind—will be offered the chance to get free blue surplus stamps if they buy orange-colored food order stamps with part of the public funds they receive. To get the blue stamps, they must buy at least one dollar's worth of orange-colored ones for each person in the family per week. For each dollar's worth of orange-colored stamps, they get free 50 cents' worth of blue stamps. Orange-colored stamps will buy anything—except liquors or tobacco or food eaten at the store—which is sold in the stores of cooperating merchants. Blue stamps will buy any of the surplus foods. Foods now on the surplus list include: butter, eggs, dry edible beans, dried prunes, oranges, fresh grapefruit, wheat flour, graham flour, and corn meal.

Second plan for distributing surplus food order stamps does not require the purchase of orange-colored stamps. People who were receiving grocery orders, as part of the direct aid their local government was giving before the stamp plan went into effect, may ask for blue stamps. With these, they can go to the cooperating grocery stores and buy any of the surplus foods.

Local and Federal Government experts, the trade, and nutritionists are watching carefully how these experiments work out, to determine whether they justify extending the stamp plan throughout the country. Not until this new method of handling troublesome surpluses and relieving serious diet shortages has been proved effective and efficient in a handful of cities, will it be made a general program.

MEANTIME supplies of surplus foods are being moved out to relief families in other cities and towns by the old method of FSCC purchase and State welfare agency distribution. One method of distribution is to schools providing hot lunches for children. We described the school lunch program in our Jan. 30, 1939, issue. Since this article appeared, a number of readers have written us asking how they can get such a program operating in their communities. The answer is: Write or call on your State Relief Administrator, or ask your School Superintendent to do so. This Administrator will tell you how the school lunch plan works and what help he can give you.

EXTENSION WORKERS in South Dakota are making a dramatic demonstration of what a cooperative program for better nutrition can do when it is well planned and vigorously pushed.

First, they organized a State Nutrition Committee. Members of this Committee included the State Supervisor of Homemaking Education of the State Department of Education; the Associate State Director in charge of Home Economics of the Farm Security Administration; the State Director of Maternal and Child Health Work; the State Supervisor of Public Health Nursing; the State Demonstration Leader. Chairman of this Committee is the Extension Service Nutritionist.

Next, they organized County Nutrition Committees. On these Committees were County Superintendents of rural schools; Home Management Supervisors of Farm Security; all Homemaking teachers from local Boards of Education; the County Nurse; and the Home Demonstration Agents of the Extension Service.

To operate a hot school lunch program with contributions of surplus commodities a sponsor is always required. In South Dakota, the State Extension Service made itself sponsor. Sixty-eight counties received assistance with the hot lunch program in 1938.

Reports the State Extension Nutritionist: "The County Nurse of Union County says that in all schools where hot lunch was served there was a decided improvement in physical and mental condition, that more milk and dry skim milk are being used and a better variety of food is being served to the children.

LOW-INCOME farm families living in rehabilitation community projects have their own type of FSA health program. Most of these families are paying $1.50 to $2.50 a month out of their own incomes for complete medical care. In some cases the Government lends money until the families can meet the bill themselves. This is the health center of the Tygart Valley Homesteads community in West Virginia.

Health Security for the Economically Insecure

How the Farm Security Administration helps low-income rural families to budget for adequate medical care

THE BARBER in the small southern town paused in his shaving.

"Y'know," he said, "it's a funny thing about Doc Brown. He came in for a haircut the other day and paid me in cash. First time in years."

"What's so funny about that?"

"Why, the Doc's been paying me in vegetables or fruit for a long time—a quart of beans for a shave, or a box of peaches for a haircut. That's how the farmers paid him, so that's how he paid his bills. But since they've started the new health plan around here, Doc Brown pays cash. I guess it's because he's getting cash from the farmers who go to him."

Building health security for Farmer Smith builds economic security for Doc Brown. That's one of the byproducts of the Farm Security Administration's plan for bringing medical care to low-income farm families, started 3 years ago. Relief and low-income farm families, the Farm Security Administration realized, must be first of all good consumers of medical care. Then the job of rehabilitating them into self-sustaining consumers of other things in the economic system can be undertaken.

Bad as the provisions for adequate medical care are among low-income families generally, they reach their lowest point in remote rural areas among the relief-level families or those families whose income rarely goes over the $500 mark a year. When Farmer Smith's 3-year-old son develops a sudden fever, or when there is an addition expected in the family, or when there is a serious accident on the farm, Farmer Smith's first thought is usually not "get a doctor," but "how are we going to pay for the doctor?"

When the doctor comes—if there is a doctor nearby and if he does come—he knows that there is probably no money in the house for his fee. To him this is a professional duty, compensation for which will have to wait on the weather, or the price of wheat or cotton on an exchange floor a thousand miles away. If the crop is good and the market steady, the country doctor might get paid in part. Or perhaps Farmer Smith may give the doctor a week's supply of fresh vegetables when harvest time rolls around.

If either of these things happens, the doctor is lucky. More likely the bill will be filed away, under "uncollectible." Pretty soon the country doctor, if he is young enough and has a little extra capital, will pack his bags, close his office, and strike out for the city in hopes of a more profitable practice. Odds are against there being a successor to him.

"Many of our rural communities today are in dire need of suitable medical attention and hospitalization," the head of one of the large farm women's organizations told the National Health Conference in Washington last July. "Even at the peak of agricultural and national prosperity, four-fifths of the rural areas of the United States lacked any organized health service. Generally speaking, human life in the United States today is being wasted recklessly."

There were doctors, there were hospitals, there was some equipment—but these were hardly enough to fill the void. The Bureau

REGULAR examinations and babies' and children's clinics form an important part of most of the FSA health plans. Few of the parents of these children could afford physical check-ups if it were not for the cooperative health program. Families pay from $15 to $30 a year for complete medical care under the program.

of Agricultural Economics made a study 3 years ago of rural medical facilities in 19 States and found that as a whole farm families set aside 8 percent of the total family budget for medical care. Yet, the report found, rural areas, compared to urban centers, were undersupplied in doctors, dentists, nurses, and hospitals. Massachusetts—90 percent urban—had 147 private physicians and 100 hospitals per 100,000 population; North Carolina—79 percent rural—had only 71 doctors and 56 hospitals for the same number of people. "It appears that urban areas have roughly double the per capita medical facilities that rural areas have," concludes the report.

As serious as the lack of medical care is in rural areas as a whole, it becomes many times worse for the low-income farm family, the family on relief or of near-relief status. Costs of medical care in rural areas have gone up in the past 20 years; at the same time, the rural slum has been taking its toll of more and more farm families cast adrift by impoverishment.

In poor southern areas—particularly among share-croppers — expenditures for medical care were found to be considerably less than among more prosperous farm families in 1936 by the Bureau of Agricultural Economics study. "This does not mean that the sharecroppers have less sickness, but rather that they have less money with which to pay for medical care and consequently receive less care and have higher disability and death rates," declares the report.

A study in the Ozark area of Arkansas brings the same picture — more sickness among the low-income farm families, less medical care, and naturally, a population unfit for the fight for rehabilitation.

Medical care for most of the Farm Security Administration rehabilitation families now under the health program used to be definitely a luxury item, something to be resorted to only when sickness reached its most serious stages. Facing those families was a dual barrier: lack of medical facilities; and the inability to pay for what services were available.

When the Farm Security Administration stepped into the picture, it put health first on the rehabilitation program of farm families. This is not merely emergency care, but a program of preventive medicine set up on a cooperative basis so that all families who take part in the program can have medical care whenever they need it, and regular check-ups to catch at their onset serious disease or disability.

For the doctors, too, such a program means more security — economic security. Now they are being paid in cash for their services, and in return are rendering medical care to low-income farm families who previously seldom were in a position to pay when sickness struck.

"The United States Department of Agriculture is directly interested . . . in the health conditions of rural families," wrote the Assistant Secretary of Agriculture a few years ago. "In the last analysis the whole program of work of the Department is aimed at the betterment of farm life in this country, and surely health is a first consideration in measuring a well-rounded satisfying life."

To attain that "betterment of farm life," the Farm Security Administration has for several years been rehabilitating hundreds of thousands of destitute farm families. To do this it has had to resettle many of these families on new land. Then it has loaned them money at regular interest rates to purchase equipment and household necessities. Finally, it has given help and advice for planning the farm and home program. In that way the families have been taken off relief rolls and put on the road to a self-sustaining life.

The Farm Security Administration knows that economic and social programs of rehabilitation fail when there is no program of health rehabilitation.

"Quite aside from any humanitarian purposes," says the head of the Farm Security Administration, "the Farm Security Administration has found, as a lending agency, that a family in good health is a better credit risk than a family in bad health. It has developed plans for medical care because it has found that good health is a necessary part of a family's rehabilitation."

Good health for relief farm families must be budgeted if sudden sickness is not to wreck a family's whole program of financial independence. True, a family might go several months or even years without a hospital or doctor's bill, and then, suddenly, find itself once more at the destitute level as the unplanned for medical bill eats into resources and savings. To avoid this, it was decided that a good plan would be to have each family contribute a small sum each month in return for medical care whenever needed.

That meant cooperation among a group of Farm Security Administration clients and other eligible families in any given area, who band together and pay a specified amount each month for medical care for the family. Sometimes the medical care covers hospitalization, sometimes dental examination and treatment. But almost always the plan covers regular examinations, some form of preventive medicine, needed drugs, and medical attention whenever the family actually needs it—not after all household remedies and patent medicines have failed.

Families have, wherever possible, free choice of physician, and county and State medical societies supervise the administration of the plan in cooperation with representatives of each medical cooperative, and with whatever help is needed from Farm Security Administration officials.

Usually the Government lends the family funds to pay its medical insurance under the plan, though in some cases the family is able to pay out of its own earned income. These loans differ from loans for equipment and other purposes only in that they are earmarked for medical care and must be used for this and for nothing else. As with the other types of rehabilitation loans by the Farm Security Administration, these are being repaid far more rapidly than had been expected as impoverished families once again find themselves making a going concern of the family budget book. Of course, many of the families find themselves able to pay for the health care out of their own income after a year or two and no longer need the loans.

Today some 130,000 families are receiving medical care under this set-up. Projects are operating in 23 States, and are being extended to include more of the 700,000 low-income and destitute farm families on Farm Security Administration rolls.

Each of these families is paying between $15 and $30 a year—depending on its ability to pay and the type of plan offered—for medical care. Few families withdraw from this type of insurance once they realize the need for it; few doctors have found themselves opposed to this method of securing payment for medical care from families who otherwise could never bear the financial burden of illness.

There are two general types of projects. First, the rehabilitation projects where farmers in one or 2 counties become members of the cooperative and are served by any of the physicians joining in the plan. And, second, the health programs in the Farm Security Administration community projects, where families have been resettled in small communities, in an attempt to make them self-sustaining by development of local industry and agriculture.

In the first type of plan, the family pays its dues to a trustee who pools the funds into a lump sum. Usually a certain percentage of the pooled amount is set aside for hospitalization and emergency needs, including surgical care. Then the rest is divided up into equal monthly allotments. Each month doctors participating in the plan submit their bills for all families who have been served by them.

A committee chosen from the doctors themselves goes over the bills, cutting those charges that it feels are too large, and checking fees against the standard schedules that have been set up.

If there is enough money in the pool for that month, the doctors are paid in full; if not they are paid pro rata for their share out of the funds. If there is a surplus, it is carried over to the next month, and if at the end of the year there is anything left over, the funds are used to complete paying bills for those months when the pool ran short.

Coffee County Health Association in Alabama has such a plan. There, families pay from $18 to $30 a year for medical care, depending on the size of the family. Two-thirds of the money goes for doctors' bills, after a 5 percent deduction is set aside for administration expenses. The remainder is for hospitalization and surgical care. Fifteen doctors and surgeons serve the 307 member families.

Last year 74 percent of all doctors' bills presented were paid, and hospital and surgical bills were paid in full. The doctors and hospital submitted bills that totaled $9,868.78; all but $1,875.41 was paid—this, remember, from families who in the past rarely could pay even a small part of the doctors' and hospital bills. The doctors made a total of 918 visits to the homes of members, and 1,717 visits were made to the doctors' offices. A total of 913 persons received some kind of medical care during the year, while 78 had hospitalization or surgical treatment. Average dues were $27.15; average medical bill was $23.63 a family, and hospital bills (spread over all the families) averaged $8.51.

That the doctors approved of the plan is indicated by this simple statement by the officers of the county society: "After one year's operation of this Health Association Plan in Coffee County, the Coffee County Medical Society, consisting of fifteen physicians and surgeons, is much pleased with the results obtained.

"The members of this society unanimously approve of the plan for 1939 and urge that it be extended to take on more families in the Farm Security Administration program in Coffee County."

Out in Tygart Valley Homesteads, nestled high up on a plateau of the West Virginia Mountains, is a good working example of the "community-type" plan. There are over 30 of this type of plan in operation. Some of these health plans are of necessity restricted to one physician because of the community's remoteness and distance from any well-populated areas.

Tygart Valley is one of these. Over 120 families of the Tygart Valley settlement are now voluntarily paying $2.25 a month out of their own incomes for complete medical and hospital care for the family. Joined into an association, the members elect their own board members, who administer the plan in cooperation with the doctor and a Government adviser. Before the plan went into effect there was only a community nurse on the project to give emergency medical attention. The nearest doctors were in a town about 10 miles distant.

One dollar of the members' monthly dues goes for the doctor's pay. (He is also paid a small amount by the Government for community health administration and is also required to give medical care to non-members of the association at a small fee.) One dollar goes into the hospitalization fund under an arrangement with 2 modern hospitals in a nearby city. The remaining 25 cents goes for overhead and into the drug fund, for purchase of all medicines and supplies, except the more expensive ones which the patient gets at cost.

A well equipped clinic is provided the doctor, including a waiting room, consultation room, examination room, and laboratory. Several pieces of the equipment, including an examination table, were constructed by members of the association—most of whom were farmers, miners, or woodsmen before they took up residence on the homesteads.

The young doctor in charge, assisted by a capable nurse, has set up a well-organized community health plan, that includes periodical examinations for all members of the association, pre-natal clinics, infants' clinics, nursery-age children's clinics, and all phases of preventive medicine, such as inoculations against typhoid and other diseases, advice on diet, and so on. The families pay no extra charge except a 50-cent fee for the first

[*Concluded on page 14*]

QUACK MEDICINES and cure-all "herbs" still find a ready market among impoverished rural families unable to afford proper medical care. Today over 130,000 low-income rural families receive adequate medical attention under the FSA program. And to the poorly paid country doctor has come economic security because of the plan.

CONFERENCE

50 Women Talk It Out

With the Secretary of Agriculture, 25 city women and 25 rural women look at America's biggest problem—building for abundance— and do some tall thinking and some thoughtful talking

RECENTLY a letter went out from Washington to a woman in Muleshoe, Texas. She is a farm woman. She knows the aches and pleasures of living from the soil. She knows what the ups and downs in farm income mean to the clothes her children can wear, to the food they eat, to the schools they can go to, to the medical care they can get.

Come to Washington, the letter said, and talk it over with the Secretary of Agriculture and his associates in administering farm programs. The letter went on: "The American home needs abundance of food and clothing. The American farmer needs buyers for the abundance he produces so that he may enjoy some of the abundance that industry can produce. The increasing balanced abundance that both the American home and the American farm want can be brought about only if homemakers and farmers understand that the problems they face together are essentially the same. These are also the problems with which the Department of Agriculture must deal on behalf of all consumers and all producers.

"To deal with these problems Congress has given certain powers and duties to the Secretary and to the Department of Agriculture. How can we best use them for the benefit of the consumer, the producer, and the general welfare?

"We want to work these problems out in the American way, the way of a Democracy. We do, therefore, want your thought and counsel. I am sure we shall have them in good measure. We have the feeling that better solutions are found to problems of a Democracy in proportion as the people understand their problems."

Forty-nine other women got such a letter, too, all of them leaders of women in their communities, or State, or Nation, and each of them a homemaker who takes time to think about the problems of other people, as well as her own. Some of them help lick those problems by working in farm organizations; in home demonstration clubs; in church and school groups. Some work at them in labor, cooperative, and consumer organizations. Some know at first hand what it means to live on less than $20 a week; others are better off, but the people they try to help are not. Some live in cities, some on the farm. Some live in the South, others in the West, North, and East.

These 50 women came to Washington. For 2 days they stayed. Questions were put to them. The women gave their opinions in answer, or posed questions, in turn, of their own.

Democracy was at work, those days, vigorously, realistically, enthusiastically. As the Secretary had said: "The answer to problems relating to securing abundance, if it is going to be found in a democratic country, will have to come out of the thinking of the people themselves, rather than out of the thinking of any group of officials." And so they thought. And the thinking went to the heart of America's biggest problems.

Answers to such problems are not to be had easily. "The greatest cost," said Secretary Wallace, "is thinking. That is the hardest work there is—I mean, thinking outside customary channels." Complete answers can come only from every citizen, not just from 50 citizens. Such conferences as these in Washington were just to show the direction in which thinking needs to be done. They were not to dictate thought. Nor were they intended to reach conclusions. They proposed simply to focus attention on basic difficulties confronting America and by so focusing to stimulate through these women the thinking of women everywhere.

Do We Have Abundance in America?

Each of us wants it. We want it for everyone else. But do we have abundance?

This was the first question posed to the women who came to talk with Department of Agriculture officers.

First, they said, let's define what we mean by abundance. "A little more than the absolute necessities," said one woman. "It's more than just physical things," said another, "it includes spiritual and aesthetic essentials, too." From one citizen came the reminder that what might be abundance for her might not be abundance for the next one. We have abundance, said another, but we don't have good distribution of it.

Soon the women were recounting evidences of the lack of abundance. "Take Fall River, Massachusetts," said one. "I don't know of any city where the contradiction of potentiality for abundance and the actual lack of it is more striking. Hundreds of empty mills, mill space where nothing is being manufactured, where all the facilities for manufacturing are there, but nothing is being made. And on the other hand, hundreds of dilapidated tenements where dilapidated people are living without enough money to purchase the barest necessities of life."

"Almost one million people in Chicago are living in families whose incomes are less than $800 per year," remarked another visitor.

"THE ANSWER to problems relating to securing abundance, if it is going to be found in a democratic country, will have to come out of the thinking of the people rather than out of the thinking of any group of officials."

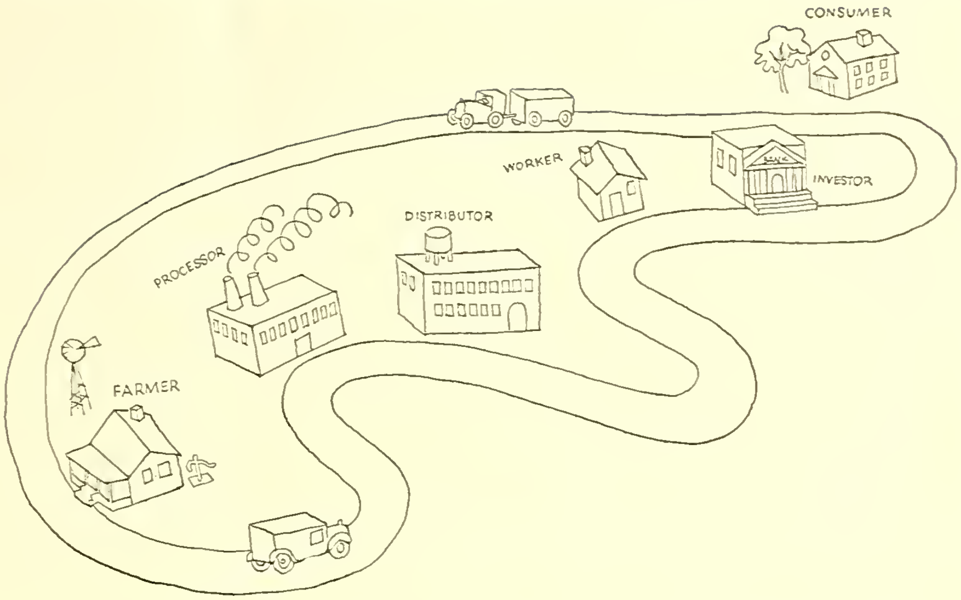
"Easter Monday I stopped in to see one of our members. I found her in bed recuperating from a long illness. Her oldest daughter, 14 years old, had to stay home to be nurse and mother to the other children. I was invited to stay for lunch. That consisted of pancakes and tea. I asked her, 'What did you have for breakfast?' She said, 'Porridge.' I said, 'What will you have for dinner?' She said, 'Pork and beans.' And she added, 'I'm sick of pork and beans.' The mother was very proud of this little daughter who could take care of a home, and she hoped that she would soon be well so that her little girl could go back to school. This family's income was $55 a month."

"When I traveled from St. Louis to Washington yesterday and the day before," said another citizen, from Missouri, "I purposely made as much of the trip by daylight as possible, and I tried to make the trip as though I was making it for the first time. I looked out of the train windows all of the time, and when I came to the end of the journey the one word that would express what I saw would be the word 'shabby.' That holds true of town and country alike. Now, of course, you will say, 'You came on the railroad and you saw the shabby part of the cities.' But, then, there they are."

More evidences of lack of abundance poured out. From Georgia: "Many of the people in Georgia are eating pepper grass as their only substitute for vegetables and fruits. They go along the railroad track and gather pepper grass . . . As I go about in the South amongst the textile workers and amongst other workers in other industries and see some of the things I see, it challenges my conscience."

"In Iowa," reported another leader, "we are supposed to have A-No. 1 agricultural land, and yet as I drive up and down the highways of Iowa I see many homes that are not painted, and many homes in ill repair, and many things low in abundance. They are not getting the things they need, and I know if I went inside those homes, I would find only about one-fourth of the homes have electricity; only about 8 percent of the tenant homes in Iowa have running water in them. Although these things exist, we are not getting them into the homes of the people."

They didn't specifically define the ingredients of "abundance," these consultants with the Department of Agriculture. With such accounts as these, however, they made clear that what we have is far from "abundance." And, said one woman, "Unless we have abundance for all, the abundance of some is bound to be in danger."



"INCREASING balanced abundance that both the American home and the American farm want can be brought about only if homemakers and farmers understand that the problems they face are essentially the same. These are the problems with which the Department of Agriculture must deal on behalf of all consumers and all producers."

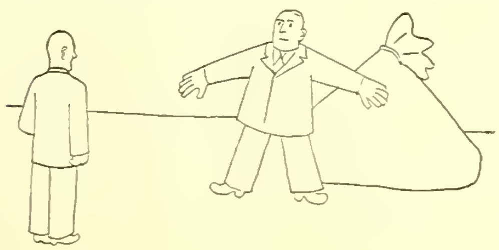
Can America Produce Abundance?

Second poser presented to the 50 women, sensitive to the needs of the country, was this one.

Out of their comments grew the request that they be supplied with facts: Facts as to how much productive power we have; as to whether we can organize that power so that we can produce abundance; as to whether we can get it spread around so that each person gets at least an irreducible share of security and necessities.

From an expert came these statements in answer to such requests for facts: "On the agricultural and industrial side we have the knowledge and the physical basis to produce a very much higher standard of living than we now produce." We are not using our full capacity to produce. One estimate says that even in 1929, 20 percent of our capacity was going unused. Another indicates that in 1929 "we could have produced a national income of 135 billion dollars in goods and services, as against the 96 billion we did have." "If we used effectively our present resources and our present labor and techniques, we could increase our physical production today sufficiently so that, without raising the cost of living, all families with less than $2,000 incomes could have $2,000 a year, and those with more could still live as well as they lived in 1929. That is assuming, of course, that all the increased production was somehow distributed to those who now have less than $2,000."

"UNLESS we have abundance for all, the abundance of some is bound to be in danger."



One citizen sagely remarked that this was more than a physical problem. "It seems to me that there is also a social and human problem that must be taken into consideration."

Why Don't We Have Abundance?

If there is merit in the claim that America has the capacity to produce abundance, what is stopping her people from doing so?

This third question provoked more lively discussion.

It's the cost of things, some said, that stands in the way of everyone enjoying abundance; prices that don't change as incomes change.

"Industries that produce consumer goods have restricted their production and have kept prices up," said one woman. On the other hand, "the farmer sells on a nonrestricted basis. That is, he produces as much as he can, and so he is caught between this rigid price up here and the price at which he has to sell."

Others claimed that those industries most highly monopolized are able to control the prices at which articles are sold. Those where a considerable extent of competition exists, as in clothing, do change their prices as buying power changes. In industries where competitive prices are not operative, or where there is no public control of price, such industries "can elect at their own discretion to retain an unduly large share of income for their own pockets and disburse a small part as buying power to the community."

Some figures produced by the experts at this point gave pause: "Between 1923 and 1929," it was said, "we had perhaps a 20 percent increase in the output per worker. During that period, the total wage disbursements of all city industries increased only 20 percent—just the amount that the number of workers employed increased. In other words there was no gain at all in the income of workers in city industries between these years. During the same period, however, payments in the form of dividends and interest increased 50 percent. Payments going to those who do not expend all that income on consumption increased 2½ times as fast as the payments going to the great mass of the population who might have consumed the products of industry had they been given the buying power."

But price policies alone were not held accountable by these debaters for lack of abundance. Wages and wage rates came in for a share of attention.

"We farmers," said a woman from the West, "certainly know that if the wage earner doesn't have sufficient wages to purchase the food that is necessary to maintain his family, as it should be maintained, he can't purchase the products which the farmer produces. We know that."

"Yes," said another, "and if the farmer doesn't get the price for his products, he can't purchase the products of labor."

Standing between the farmer and the buyer of farm products are many middlemen—processors, transporters, dealers. From North Dakota came the story from one woman, of rye put on the train by farmers at a cost to them of 2 cents a bushel, when a loaf of rye bread sold for 15 cents in the stores of the same town. Such facts give farmers pause. "Yes," said another, "and while the binder which we have had to buy has gone up in price, the price of wheat has gone down."

Does one of the reasons why America has not an abundance lie in investment policies? The women asked themselves that. What's stopping private investment? Someone brought out the fact that Government was doing a lot of investment. But could Government do it alone? Was there still not need for greatly increased private investment that would build up new opportunities for employment, new products for consumers, new sources of income for capital?

Large questions, such as these, need large answers. The women, naturally, did not have complete answers.

What Does America Need for Abundance?

Ideas came brisk and fast as the women explored America's unfilled needs. Food came first, as it does in life.

From one of the Department of Agriculture experts—herself a woman who has given deep thought to and research on America's diet—there was a report that "half of the population now have diets which will not furnish a satisfactory level of living."

Would diets be improved if there were more and better education? First, said many of the women, we have to see that many families get more income. Forty-two out of every 100 families have incomes of less than $20 a week; 14 out of every 100 have incomes of less than $10 a week. "Now you cannot give these 14 a lecture on diet," said one woman. "You can't tell them that they must have meat and vegetables, green vegetables, in order to live properly. I think that when you provide an adequate income you can then go on and teach them how to live."

But some people, allowed another woman, don't like the things that are good for them. A delegate from the South averred that many families in her part of the country could produce a better balanced diet, but don't. But how about city families? "You can't raise a nutritive diet on the back steps of a city tenement house," observed one citizen from the North. Another thought many city families have to do what working girls she has observed do. "If they have to have more clothes or carfare or a present for somebody, they take it out of their food budget. I think everyone of us," she said, "tends to cut down on the food budget first."

First on the list of agreed needs, then, was greater buying power. Next came more information on how to get the best returns for income.

What about the education people are getting now? Is there enough of it? Is it good enough? The women pondered on these questions.

"We are educating our boys and girls on the premise that they are going to go to college and be professors. We want them to think they are all going to be doctors and lawyers and white-collar men. Is it any disgrace," asked this woman, "to teach them to work with their hands?"

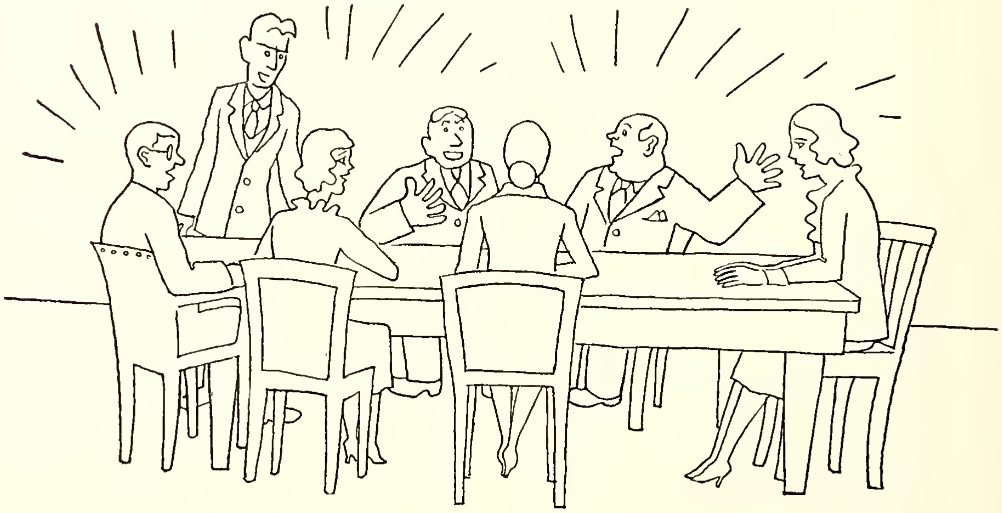
"Those of us who belong to unions," reported another, "have had our hours shortened. We have more leisure than we used to have." She was for more education not only to occupy leisure time but to learn how to use it profitably.

From a Wisconsin woman came the statement that only 50 percent of the rural children ever go to high school.

Inadequate incomes, it was suggested, were at the root of this; incomes that would not provide decent clothing to wear to school; incomes that made transportation impossible; incomes that have to be supplemented by the labor of everyone in the family capable of working.

There should be more vocational education in high schools, claimed one. Another wanted more home economics training and

"WHATEVER is done, let's do it the democratic way. Plan from the bottom up, instead of from the top down."



wanted it taught in grade schools. More aid from the Federal Government, others thought, would help.

Bobbing up constantly in the talk was the problem of low incomes. After all, schools and education cost money. How are we to have more, until incomes are raised, pondered these women.

What Would You Do To Supply Abundance in America?

"I would start industry and put people to work," came the first answer to this fifth question.

"Why would you do that?" this farm woman was asked.

"Because it would give workers the financial ability to buy agricultural products which in turn would give the farmer the ability to buy manufactured goods," she replied.

Such reasoning sounded like good sense to some of the city women too.

Other suggestions poured out. Among them, an annual wage for workers.

"If we have a hired man," commented another farm woman, "we contract him for a year, and we figure out a job for this length of time. Industry takes workers on and lays them off. I believe in a year's salary instead of an hourly rate, and then let the employer figure out what the worker is to do during the year."

Stable prices for farm products, which would make planning ahead possible, was another solution proposed.

Developing consumer cooperatives, tying in labor and farmers, would be a useful plan, thought another visitor.

Allaying business fears would help, one believed, because then investment would be encouraged.

Remove regional handicaps, said another. Trade barriers between States and between regions should go, she claimed.

Reduce the spread between farm and city prices, urged another.

Two ideas captured the greatest support: First, let's get to know each other—farm and city people. "I think there is in the American people the ability to work out any difficulty if they first realize what that difficulty is and then cooperate."

Another proposed starting a know-each-other program with the school children. She would have city school children visit rural schools, and the reverse. Get the women together, urged another. Get people talking their problems, several urged; manufacturers, workers, farmers, consumers, everybody.

Second support-gathering proposal was this: Whatever is done, let's do it the democratic way. "Plan from the bottom up, instead of from the top down," said one.

Is an Agricultural Program the Responsibility of Rural People Only?

"I have four children," said one woman when she was asked this question. "Two of them were graduated from school. They were raised in a rural community. One of them is in Boston; the other, in Chicago. You people in Boston and Chicago ought to be interested in the kind of material I sent to you, and I ought to be interested in the kind of environment you are creating for the boy or girl I sent you."

An agricultural program, these city and country women felt, was something that touched the lives of everyone.

An "ever-normal-granary" plan, they said, was tackling a national, not a group, problem. Whether food is abundantly available in a drought year is important to city people as well as farmers.

Programs that help to conserve soil help to preserve the chance for abundance for the next generation of consumers, thought another woman. "The farmer is custodian of the land which is the Nation's fundamental wealth."

The food stamp plan, too, seemed like another program of significance alike to city and country people.

Among these women it seemed agreed that everybody in the Nation has an investment in a farm program. Furthermore, the producer of one kind of farm product has a concern in the fortunes of the producer of another kind. Said one woman: "I am interested in knowing what the cotton farmer is doing. I need to know and understand, because I need the product. We raise wheat out there in our section. I know that cotton growers need our wheat. Each of us needs the products that others produce."

"We all agree," concluded another, "that we need food. We all need that whether we live in town or in rural communities. We are agreed that in one way or another food comes from the farmer, and if we can't keep our farms, how are we going to get anything to eat?

"If we as farmers can raise some money, we are going to buy a lot of things from you

[*Concluded on page 14*]

DO YOU KNOW SIX PEOPLE?

Six people, that is, who like to have a cracker-barrel kind of confab of an evening? "Chew the rag" about this and that? Do you know such people, six of them?

Then how about planning—right now—for some cracker-barrel discussions next winter that will dig at the answers to the same questions these 50 women discussed with the Secretary of Agriculture? There's life and fun in such a gabfest, if what's happening to America is important to you. There's hope for democracy if you and your friends take time to thresh out these problems. If living in a democracy is worth something to you, you will.

Pick the people who seem to have the widest differences in point of view. Try to pull together people who earn their living in different ways: people who work for wages; people who are bosses; people who work on farms; people who work at home.

Sit around the dining room table, when you do your talking, so that anybody who wants to bang his point home has something to bang on.

Keep the ball tossing back and forth, and don't skip anybody.

We'll guarantee you'll have fun, on one condition. That's an important one. Good discussion comes only from people who admit that the next person is as decent a person, as worth listening to, and as deserving of his opinion, as the first. You'll have fun if you keep the talk good natured.

And remember, the reason for "chewing the rag" is not to make somebody else admit something he doesn't believe. It's to help you clear up your own thinking. If the next person believes what you say, that's one up. If he doesn't, maybe you haven't put your point across. Don't hold it against him.

Here's how we'll help. If you and six other people want to plan, say 7 evenings of cracker-barrel confabs next winter—once a month, perhaps, from October to April—write the *Consumers' Guide* and we'll send you some suggestions on how you can hold such confabs and some material that will provoke lively questions. It's yours for the asking. Nothing in this material is designed to sell you anything.

A Quiz on Ice Cream

WHEN YOU BUY ice cream, do you get full measure? When ice cream is packed before your eyes, insist on a standard-sized container, and see that it is packed in. Guessing won't get you anywhere when you must pick from nonstandard containers. Be sure to read the label.

When you buy ice cream, do you ask: How pure is it? What's in it? How much air does it contain? Do I get full measure?

ICE CREAM buyers ordinarily are looking for a mouthful of flavorsome internal air conditioning. But no ice cream fancier wants to trade a small amount of discomfort from the heat for a milk-borne disease. Whether or not he poses ice cream question No. 1, when he asks for a pint of chocolate, he still wants to be sure that it is a pint of *pure* chocolate ice cream he is buying. Consciously or unconsciously, he asks, "Is it pure?"

To this question there should be only one answer: "Of course." Otherwise the public health authorities wouldn't let it be sold.

But pure ice cream, like pure milk, depends upon a law or ordinance and its enforcement. As alert milk consumers know there is a checklist of specifications which guarantees them pure milk. Since ice cream is a milk product, the ice cream checklist, as might be expected, reads like the milk list.

The milk and cream which go into ice cream, or the ice cream mix, which is the milk and cream plus the other ice cream ingredients, should be pasteurized.

Ice cream should be free of visible dirt and of pathogenic organisms, which are experts' words for disease-bearing bacteria.

Ice cream plants should be sanitary enough so that there is no possible chance of contamination. (Refrigeration is compulsory for ice cream all the way from milk to the consumer.)

Synthetic flavors where they are permitted should be scrutinized carefully, and artificial colors where they are permitted should only be the kind that have been certified as harmless and pure by the Food and Drug Administration.

Finally, the number of bacteria per cubic centimeter in ice cream should be limited.

Milk consumers in some cities have come to rely on milk grades as their guarantee of purity. But grades sometimes may be trade fictions, not based on any official standard. There are, however, official ice cream grades in some cities, which, like milk grades, apply only to purity and quality. In Memphis, for example, the difference between Grade A ice cream and Grade B ice cream is chiefly a difference in the number of bacteria per cubic centimeter: 30,000 for Grade A ice cream, 50,000 for Grade B ice cream.

Grades, however, sum up more than bacterial content. They are usually a measure of all the factors which go to make up pure ice cream. But there are at least 2 things consumers should remember about them. Numerical grades are less desirable than letter grades since numerical grades give an impression of accuracy which is unwarranted. The factors which are totaled up into a numerical grade are not so precisely measured that there is much difference in sanitary safety between a score of 98 and 97. On the other hand, differences between Grade A ice cream and Grade B ice cream are real differences. The second important thing to remember about ice cream grades is that they measure only purity, and that an ice cream may be as sterile as a surgeon's scalpel and as pure as distilled water, and still be a poor quality ice cream.

Purity, obviously, isn't something that can be detected in ice cream by looking at it in the freezer. Just as in the case of milk, ice cream purity is determined finally by what's in the ice cream ordinance and the way the ordinance is enforced.

When consumers get down to the matter of ice cream purity they learn right off that they can't depend upon a Federal law, or upon a State law, but they must look to their cities to enforce purity.

They can, however, get some help from the Federal Government. A uniform ice cream ordinance, for example, is now in the process of formulation by the United States Public Health Service, the same agency which worked out the Standard Milk Ordinance. This ordinance is not ready yet, but when it

HOW MUCH AIR does ice cream contain? It must contain some, or it would not be ice cream. But if it contains too much you're paying for ice cream and not getting it. This gauge tells how much air ice cream contains.

IS the ice cream pure? It should be free of dirt and of disease bearing organisms. It should be pasteurized and be made in a sanitary plant. Ice cream purchased by the Federal Government may not contain more than 50,000 bacteria per cubic centimeter.

IS the ice cream palatable? If richness is your criterion, look at the buterfat content. Most States set a minimum, but above the minimum you get what you insist upon: from 8 to 28 percent by weight, in Washington, D. C. This gauge measures butterfat content at the factory.

is finally published, the *Consumers' Guide* will give consumers notice of the event.

Another way consumers can get help from the Federal Government is by reading its buying specifications for ice cream which it purchases for public institutions. So far as purity is concerned the Federal Government requires that ice cream be pasteurized, and that the number of bacteria in the ice cream not exceed 50,000 per cubic centimeter. It bars the use of artificial flavors altogether in its ice cream, but it permits the use of artificial colorings so long as they have been certified by the Food and Drug Administration.

There is a Latin tag which says one shouldn't argue about taste. It could also be phrased to say that each person has a right to his own food fads and prejudices. This isn't to be taken too seriously where children are concerned, but if you propose to argue about ice cream flavor with another adult you might just as well save your time. Some like rich ice cream, some like it less rich, some like ice cream syrupy, some like it hardly flavored at all. Obviously anyone who tries to be pontifical on ice cream flavor is just inviting contradiction.

But if nothing can be said finally on flavor, something can be said about the food value of ice cream.

Ice cream contains milk, cream, fruit flavors sometimes—chocolate, vanilla, or whatever you happen to think of at other times in the way of flavor—gelatin, sugar, starch sometimes, eggs sometimes, and nuts sometimes.

Of them all, the milk, the cream, and the sugar are the most important constituents. Milk and cream add fat to ice cream, plus calcium, phosphorus, protein, Vitamin A, and Vitamin G. The sugar, of course, is a carbohydrate.

Since both food value and texture depend largely upon the cream in ice cream, and since by its name ice cream is supposed to have cream in it, every State in the Union has established some sort of minimum butterfat requirement for ice cream.

The legal minima vary from 8 to 14 percent by weight. Above these minima, however, consumers depending upon their own preferences, can get varying amounts of butterfat in their ice cream. In Washington, D. C., for example, a spot check showed that the butterfat content in ice cream ranged all the way from 8 percent up to 28 percent.

Milk solids other than butterfat are usually not subject to regulations by themselves. Ordinarily where States take into account the milk solid content of ice cream they lump it with butterfat content and set a minimum for the total milk solid content. This, of course, includes the butterfat content. This minimum may vary from 18 percent all the way to 35 percent.

No laws specify the sugar content of ice cream. In practice, however, ice cream contains somewhere around 15 percent sugar.

The Federal Government's buying specifications require that ice cream contain at least 12 percent butterfat, at least 16 percent of sucrose (cane sugar), and not more than one-half of one percent high grade gelatin.

The insistence on cane sugar is aimed at the possible substitution of other kinds of sugar for cane. The other varieties are less sweet than sucrose, and therefore must be used in larger amounts. Ice cream made from these other sugars must be kept at lower temperatures.

Air, offhand, will start no bubbles rising in the mind of a consumer intent on ice cream. But air is to ice cream what water is to milk. A certain amount of water in milk, or a certain amount of air in ice cream is inevitable.

The whipping and freezing which gives ice cream its creaminess, automatically puts air in it. Thus an ice cream manufacturer may start out with 1 gallon of ice cream ingredients and end with 2 gallons of ice cream. The additional gallon of ice cream is air. Technically it is called "overrun."

In the case where a gallon of ice cream ingredients is whipped up to 2 gallons of ice cream the overrun is 100 percent. But overrun can amount to as little as 30 percent and it can be fluffed up to more than 100 cent. Experts think that 45 percent overrun is a fair amount of air.

THE FEDERAL GOVERNMENT, when it is buying ice cream, doesn't like to pay for air in excess of 100 percent overrun. So when it orders ice cream it says to manufacturers in its specifications, "See to it that each gallon of ice cream weighs 4½ pounds."

Consumers, too, can use this test. If they follow it they should demand that ice cream weigh at least 1 pound 2 ounces per quart or 9 ounces a pint.

Some States, and occasionally some cities, have taken action to keep ice cream air pressure down. Georgia, Kansas, and Pennsylvania require ice cream to weigh 4.75 pounds per gallon. Since ice cream mix ordinarily weighs about 9.2 pounds to a gallon this permits ice cream manufacturers to get slightly less than 100 percent overrun, or to put it in terms of what consumers get: to put up ice cream that is half food and half air.

Illinois simply limits the overrun to 100 percent.

Connecticut and Idaho have gone at this problem differently. They insist that the food solids in ice cream weigh at least 1.6 pounds per gallon. Since the weight of food solids in ice cream ranges from 36 to 40 percent of the total weight this establishes a minimum figure of about 4.25 pounds per gallon for ice cream.

Still another way of keeping excessive air out of ice cream is used in Chicago where the melted volume of ice cream must be at least 50 percent of the volume as sold.

QUESTION 4 in the ice cream quiz is familiar enough to quizzical consumers. It is simply the old "Watch Your Weights and Measures" admonition applied to ice cream.

Consumers know well enough that chickens stuffed with lead are not the rule when they buy chickens, and that 14-ounce pound loaves of bread are exceptions. But they also know that there are enough chiselers to make it worthwhile keeping an eye open. And from their experience with can sizes that look alike but contain different amounts of food, they know that careless commercial practices sometimes lead to consumer deception when there may be no desire at all to cheat.

Speaking to a group of ice cream manufacturers in New York, for example, a Weights and Measures official noted that the ice cream industry generally was clean both in its manufacturing processes and in its commercial practices. But, he continued, he had noticed the infiltration of some commercial practices into the ice cream industry which he deplored. So he asked the ice cream manufacturers to cooperate with him to stamp them out.

THE USE of deceptive containers was one practice he called attention to.

A Brooklyn, N. Y., ice cream company had a call from the Weights and Measures Bureau because it put up 4 fluid ounces of ice cream in a package that looked as if it contained 8 fluid ounces. At first this package had an upper compartment, which contained a toy or metal trinket. When the Health Authorities clamped down because the trinket might have contaminated the ice cream, the company tried putting a paper napkin and a wooden spoon in the compartment to see if that wouldn't get by. It didn't. The Weights and Measures Bureau ruled that the package misled purchasers, particularly the children who bought most of this particular ice cream. It stopped the practice.

Another practice the Weights and Measures official objected to was the use of off-size containers. So far as ice cream is concerned this takes the form of a "quart" package of ice cream containing only ⅘ of a quart of ice cream.

Not even the ice cream retailers realize in this case that they are short-weighting their customers. They are asked for a quart of ice cream and they hand over the "quart" package. To give the practice a semblance of legality, manufacturers guilty of this practice make a point of printing the correct weight of the package on the label. That, of course, is another argument for reading the label, even of ice cream.

What alarmed the Weights and Measures official about this practice was not only the fact that it is unfair to the unsuspecting consumers who don't read labels, but that is an abuse which becomes progressively worse. Competition, he said, will gradually result in a smaller and smaller "quart" package until consumers are forced to step in and take a hand themselves. Already a 17½-ounce quart has been seen (there are 32 fluid ounces in a quart).

The kind of action consumers will insist on, Weights and Measures experts say, will be a demand that ice cream be sold by the pound. Right now, however, Weights and Measures officials oppose the ice cream by weight scheme because it differs radically from present selling methods. To sell ice cream by the pound would mean that every little ice cream parlor and every drug store would have to buy scales.

Massachusetts has exorcised this ice cream evil, however. It has passed a law which requires ice cream to come in packages that are either 1 quart, 1 pint, ½ pint, or 1 gill in size. As a further insurance against ice cream clippers, the law provides that the State Director of the Weights and Measures Bureau may require standard shapes and dimensions.

On the subject of packages of ice cream, ice cream that is packed in a store while you watch the druggist scoop it out of the freezer, contains less air than ice cream which is packed at the ice cream factory. The scooping and packing by the druggist where it is packed tight, as it should be, forces the air out. For this reason ice cream costs more in bulk. But it is more ice cream.

Asking ice cream questions, it is plain, carries consumers back to an examination of their ice cream ordinances. When they get to the point where they are considering introducing an ordinance into their city, or bringing an old ordinance up-to-date, there are some provisions to be wary of. They are the kind that interfere with the sale of ice cream without adding anything to the purity or quality of ice cream.

THERE ARE, FOR EXAMPLE, regulations, whose only effect is that of a tariff. They bar ice cream made outside of a city from coming into the city, for no reason connected with the public health, but to protect local economic interests. The result of such regulations is to increase the price of ice cream to consumers without assuring them of better or purer ice cream.

Another kind of regulation, for which consumers should keep an eye open, is one which discriminates in favor of one group of ice cream manufacturers to the detriment of another group of manufacturers. Some ice cream ordinances specify construction or handling details so that small manufacturers would be barred from the ice cream business.

Ice cream ordinances can be written and enforced so that consumers, producers, and distributors are all given adequate protection without penalizing anyone unfairly.

•

"Health is the first wealth."

RALPH WALDO EMERSON

ON THE CONSUMER FRONT

ICE CREAM, which is discussed elsewhere in this issue of the *Consumers' Guide* is also the subject of a discussion this month at the Food and Drug Administration here in Washington.

Under the provision of the Federal Food, Drug, and Cosmetic Act of 1938 which permits the Secretary of Agriculture to formulate definitions and standards of identity for food products, the Food and Drug Administration has now turned its attention to ice cream.

In a public announcement the Food and Drug Administration invited everyone interested to submit written statements embodying their opinions on a definition and standard of identity for ice cream. At the same time it also named a day for public hearings on the subject.

After everyone has had a chance to propose what he thinks should go into it, the Food and Drug Administration will then announce a proposed definition and standard.

These will be the subject of further public hearings.

Then finally, after all the testimony is in, an official standard and definition will be promulgated by the Secretary of Agriculture.

In addition to ice cream, chocolate products and strained vegetables are also going through the process of acquiring definitions and standards.

Anyone who wants to contribute information, facts, or opinions on these subjects is invited to write to the Food Standards Committee, Department of Agriculture, Washington, D. C.

INSTITUTION is a high-powered word which commands about the same amount of respect in the fellowship of words that General commands in the army.

And that, the Federal Trade Commission believes, is a perfectly good reason why companies doing business for profit should not conceal themselves behind a word like institution which leads consumers to believe that they are organizations engaged in non-profit making activities for the good of humanity.

A California company selling what it called health foods, for example, not so long ago caught the Federal Trade Commission's eye because it called itself an "Educational Institute." After sitting down and talking it over the "Educational Institute" finally agreed to sail under its own colors.

A Chicago drug company acquired a professorial look, too, by calling itself a "Medical Bureau of Information."

"Findings are," the Federal Trade Commission announced after looking at this company's medical information "that the name 'Medical Bureau of Information' is a trade name used by these respondents, and that these bureaus are for promoting the sale of the respondent's products and are not organizations or institutions for scientific research."

Holding that false facades are in violation of the Federal Trade Commission Act, the Federal Trade Commission ordered the company to come out in the open and play fair.

THE CRY for standards blew a sweet clear note not so long ago when a conference of musical experts in London called for a standard for note "A" in the musical scale. In the United States, "A" is standardized at 440 vibrations per second. But in other countries it ranges from 435 vibrations to 442 vibrations per second. And before the days of radios "A" was anything from 393 to 567 vibrations. Just as the lack of standard can sizes introduces confusion into consumer buying, so the nonstandard "A" introduces confusion into an orchestra. The request for a standard "A" has been referred to the International Standards Association which will then refer it for action to the countries affiliated with the Association.

FRECKLES to some minds are decidedly fetching, but there are people who examine them ruefully in their mirrors. For them the first sun freckle is a signal for a trip to the drugstore in search of a bleaching cream or a freckle remover.

To protect these people from disfiguration far beyond the power of a harmless freckle or so, the Food and Drug Administration has recently issued a notice to the manufacturers of mercury bleach cream.

Creams containing ammoniated mercury are dangerous to an "unusually large percentage of persons." To protect consumers, therefore, the Food and Drug Administration has announced that it will seize any cream containing more than 5 percent of this chemical. More than 2/10 of 1 percent of bichloride of mercury also makes a cream illegal in the eyes of the Food and Drug Administration. Comparable amounts of other mercury preparations will render creams containing them liable to seizure.

All mercury creams from now on must carry warnings. First of all, no such preparation should be applied when the skin is cut, bruised, sunburned, or sore. Nor should a cream be used after a depilatory has been applied. The application of a mercury cream over a large area of skin is also dangerous.

People who use the creams should stop using them the moment any irritation appears.

Labels on these creams, the Food and Drug Administration says, should advise consumers to test the creams before they use them, and directions for testing should appear on the labels with the warnings.

In no case, the Food and Drug Administration says, should the cream be applied vigorously. Where it is applied, it should be put on in very thin layers and should not be left on for more than a half hour. At the end of a half hour the cream should be removed with benzine or oil.

Mercury creams, the Food and Drug Administration says, cannot be expected to have more than a temporary bleaching effect on the skin. Creams which might remove freckles are so dangerous that they are illegal.

CONSUMER FRONT

So that consumers won't be misled by broad claims, the Food and Drug Administration has announced that it will proceed against firms which make broad misleading claims on their labels. If they make them in advertisements, the Federal Trade Commission will proceed against them.

The Food and Drug warning to the mercury cream manufacturers was issued after qualified experts on the effects of mercury had been consulted. The warnings are based on these experts' recommendations.

Since there are bleaching creams on the market now which do not come under the Federal Food, Drug, and Cosmetic Act, because they are on druggists' shelves and will not travel in interstate commerce or because they are made and sold within a single State, the warning the Food and Drug Administration has made to manufacturers should serve as a timely warning to consumers, too.

MOTHS may or may not find a fatal lure in a candle flame. On that the experts of the Federal Trade Commission venture no opinion, but their own researches and the researches of other Government experts do indicate that the moth-flame technique is not an infallible method for the elimination of mosquitoes.

Espousing the moth-flame principle a Brooklyn, N. Y., company ran afoul the Federal Trade Commission Act by advertising that its lantern attracted and electrocuted mosquitoes, gnats, and many other insects.

The lantern, when lighted, theoretically attracted insects which were then electrocuted by charged wires which encircled it.

Experts examined the claims for this lantern and learned that the light did not attract enough insects to make the lantern worthwhile, that insects were not always electrocuted when they touched the charged wires, and that those that did die didn't necessarily succumb to the electric wires.

Confronted with these facts the lantern company admitted that they were substantially correct, and agreed to modify its advertising in the future.

50 WOMEN TALK IT OUT

[*Concluded from page 9*]

in the cities. We will put in bathrooms and buy much nicer clothes and go places. We will get better homes. We will give our children better education, better entertainment, and make them better Americans. I want them to be better Americans."

Seventh, and final, question put to the women was this one.

What Can an Agricultural Policy Contribute to Better Living?

Agricultural policy can do something about farm tenancy, said several women. Uncertainty of tenancy makes poor farmers, and poor farming wastes land and human wealth, they pointed out. People who live long enough in one place to vote make better citizens, one woman commented.

Perhaps a farm program could do something to help poor farmers along the road to better living by encouraging cooperative enterprise, suggested one. "I don't know why there couldn't be cooperative features in farming, where farm tools are owned cooperatively, where the land could be owned cooperatively. In that way people could do together what they cannot do individually."

CERTAINLY, concluded these women, the people to whom building a better America is important should know what present agricultural policy is attempting to do. They fired their own questions at the experts from the Department of Agriculture. Tell us, they said, what is being done to conserve soil; to ensure food supplies in bad years; to gain parity prices for farmers; to insure crops; to reestablish farm families on the bottom rung of the income ladder; to move surplus foods to the people who need them most. The experts were there to give their answers.

But Agriculture can't do this job of building a better living alone, these women said. Agriculture needs the cooperation of Commerce, of Labor, and other agencies of government. From some came the suggestion that WPA, Social Security, Unemployment Insurance—all were helping the farmer lick his problem of insecure and inadequate living by helping the people who want to buy his products.

And so it went, this series of discussions. And so it can go in every village and city in the country where there are people who want to be responsible citizens. "I can't think the word could be said often enough," remarked one woman. "It is 'haste.' Don't wait for the next depression to determine what is going to happen to us after that. Begin now to be responsible, to be intelligent, to be informed, to work with other groups. By the interplay of ideas between these groups, we will accomplish what we want. I think," she concluded, "if we women are sincere and honest about the thing, we can start a tremendous movement that will spread to other groups throughout the country."

HEALTH SECURITY FOR THE ECONOMICALLY INSECURE

[*Concluded from page 5*]

night visit and a 25-cent fee for the first day visit in any one illness, the purpose of this being largely to discourage families from calling the busy doctor when they might make an office visit.

Recently a dentist set up an office on the project and for 50 cents a month per family is giving complete dental care for all children under the age of 15—children who for the most part never had a tooth examination in their lives. Later he hopes to extend the insurance scheme to adults.

"The plan is the finest thing on the project," remarked one enthusiastic member. "These people never had medical care like this before. And remember—they *wanted* the plan. It was largely at the demand of the homesteaders that the plan was set up. . ."

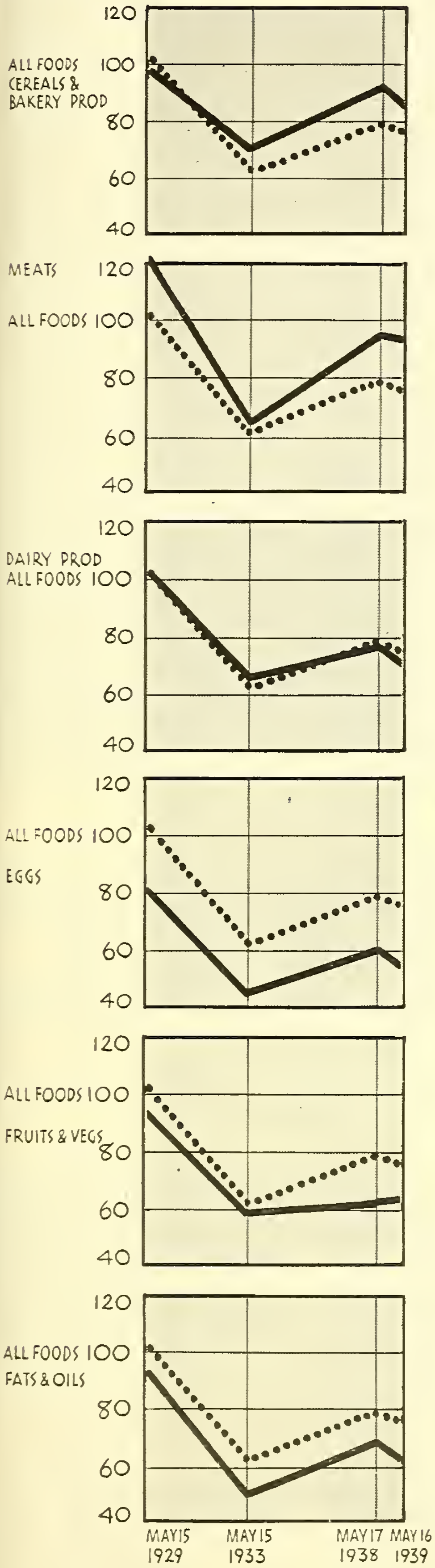
A woman told of her husband who had had a sudden attack of appendicitis. "I don't know what we would have done if we hadn't belonged to the association," she said. "We probably would have been in debt for years paying off the bill." Her husband's operation cost him nothing more than his monthly dues.

A man whose 2 children had had serious accidents the past winter saw them both get the best hospital and surgical care available and come home in tip-top shape. "And the only expense he had was the cost of the trips back and forth to the hospital," remarked one of his friends. "His kids probably would never have had hospital care if not for the plan."

The young mother on whose skirts tugged a rosy-cheeked 2-year-old daughter was all for the health association. "I had the doctor before she was born, and let me tell you, I wouldn't miss the clinic for anything. Whenever the children get sick now, I don't worry about paying the doctor. All I have to do is call him, and I know everything possible is being done without anything happening to my small budget."

"CERTAINLY they're happier and healthier because they have regular medical attention," said the doctor, impatient at the question. "From my angle, it's a lot surer to stop a sickness before it gets started than have to be called in three days later when the fever's up and the patient weak. We work on the theory of prevention. It's the best kind of medical care, because it's designed to prevent illness, not cure it after it's too late."

A PERSPECTIVE



FOOD COSTS. General level of costs remained practically unchanged from April to May. For the second successive month price increases in some foods balanced price decreases in others. During this monthly period an increase in fresh vegetable prices (largely caused by the shift from the old potato season to the new potato season) nullified price decreases in other major foods. Decreases in items other than dairy products and fats and oils, however, were very small.

Compared with last May, costs are down 3 percent. Fresh fruits and vegetables are the one food group in which costs are higher than last May. Despite higher prices for beef and lamb, meat prices in general are below their 1938 level, because of marked reductions from 1938 levels in pork prices.

FRUITS. More apples, cherries, apricots, lemons, peaches and plums than last summer, but fewer grapes, oranges, and pears are in prospect. Apricots and peaches generally are most plentiful in July.

POTATOES. Supplies are expected to increase seasonally in July, and to be smaller than in 1938.

MEATS. Outlook this summer is for more better grade beef and pork, but less lamb than in 1938. During the summer months, lamb and better grade beef supplies usually increase seasonally, while pork supplies decrease.

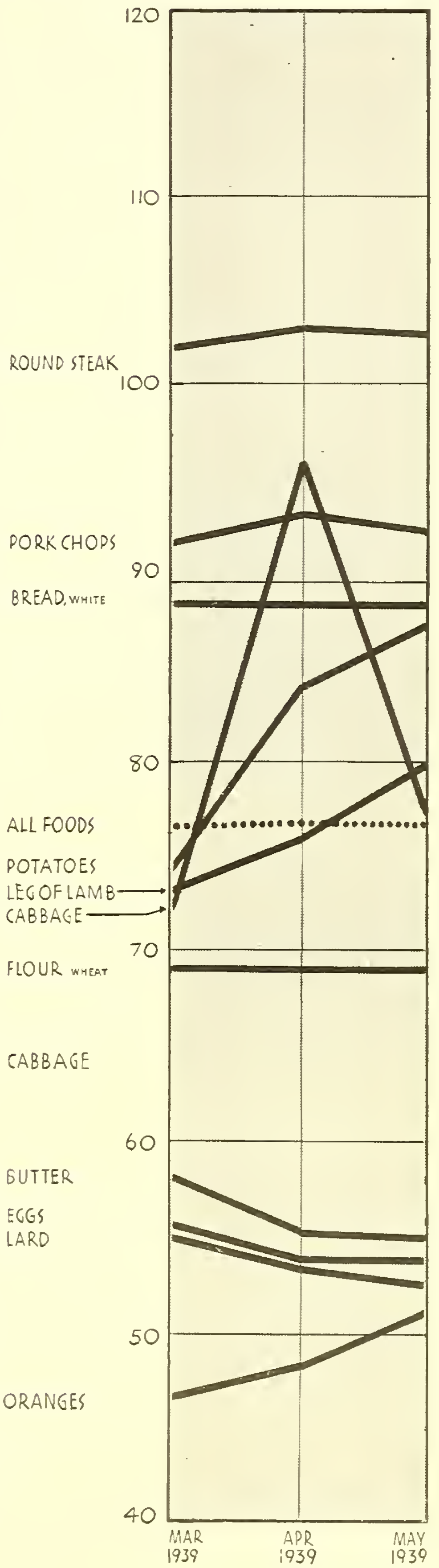
POULTRY. Marketings generally increase monthly during the last half of the year until they hit their peak in December. Increase in supplies over 1938 may not be as large as indicated earlier.

EGGS. Production ordinarily declines during the summer months but it looks as if supplies will continue above their 1938 level.

DAIRY PRODUCTS. Milk production is expected to be higher than in recent years during the summer months, when production starts its seasonal downward swing.

MELONS. Smaller supplies of watermelons and cantaloups than last July are expected. Watermelon supplies ordinarily are heaviest in July; peak cantaloup supplies come in August.

A CLOSE-UP



IN THIS ISSUE

JUNE 1939 ● VOLUME VI, NUMBER 4

Health Security for the Economically Insecure . . . 3
50 Women Talk It Out 6
A Quiz on Ice Cream 10
On the Consumer Front 13
Your Food Supplies and Costs . . 15

U. S. GOVERNMENT PRINTING OFFICE 155035

1.94
Ad422C
Cop.6

WHEAT

CONSUMERS' GUIDE

JULY 1939

GASOLINE

NEW USES

BOOKSHELF

FOOD PRICES

CONSUMERS' GUIDE

JULY 1939 VOLUME VI, NUMBER 5

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

STUDENTS sometimes think of going to town as a strenuously gay means of escape from texts and classes. Some students in New York City last year, in a college course on the consumer in economic society, used the town as their text. This demonstration course was given by an economist formerly of the *Consumers' Guide* staff. Going to town, the students got a consumers' eyeview of the world.

One trip to town took them through a big dairy. They saw the physical machinery of milk processing and distribution. Interviewing a Government milk specialist, they got some idea of the economics of milk. And with a dietitian they followed the economic problem into the homes of low income families trying to get enough milk for the youngsters.

Another day they went to town to go through a candy factory and a bakery whose biscuits sell in many States. There these students got a vivid idea of the mass production of foods. Listening to employers and employees of the factories, they also got an insight into New York State's minimum wage law as one approach to the goal of higher living standards for consumers who are wage earners.

Farm surpluses and their distribution to the underfed in the cities took on a new meaning after the students had completed a couple of other field trips. One took them into the homes of low income families in New York City. The other led them from office to warehouse to local station through which distribution of food by the Federal Surplus Commodities Corporation is handled.

Turning to the customary channels of distributing perishable foodstuffs, the students followed for themselves the route which fruits and vegetables take in getting to New York consumers. The route led from the Jersey side of the Hudson River to New York on car floats, onto the railroad piers, into the freight and refrigerator cars, through the auction halls, and out into the market right up to the place where fruits and vegetables are loaded onto trucks for the last time before they go off to the retailers. Curious students on this trip buttonholed jobbers and market superintendents to get their story of the bewildering tracking and backtracking that fruits and vegetables go through.

New York has its advantages when it comes to showing a class its way around the world. But there is no place in the country which doesn't offer similar opportunities for introducing students into the realities of what's going on.

JOT DOWN as a fallacy the belief that a college education rids a person of his fallacies.

Not so long ago (November 29, 1937) the *Consumers' Guide* published an article on food fallacies. Since then an educator has made a survey of the fallacies held by high school students, college students, and just plain adults.

Found hiding in the mental crevices of students and adults were some fallacies that are venerably whiskered.

Two percent of the high school students questioned, 6 percent of the college students, and 9 percent of the adults, for example, believed that thunderstorms hasten the souring of milk.

Thunderstorms don't sour milk, an inquiry among the Department of Agriculture's milk experts established. It's the action of bacteria multiplying in milk which produces the souring. Heat is an aid to bacteria in their multiplication, however; and cold retards their development.

But thunderstorms are most likely to occur during a period of warm weather, and that, the experts say, is behind the fallacy. Before the days of effective refrigeration, after a spell of hot weather followed by a thunderstorm, someone would look at the milk and find it sour. Deduction was: Thunderstorms made milk sour.

Keep your milk cold, and you needn't worry about thunderstorms. Indeed modern refrigeration is so well developed that cream or milk can be kept in cold storage for a number of months, and shipped economically for thousands of miles (when State or other man-made barriers don't interfere).

A fallacy that commands a large following is the one about black eyes and beefsteaks. Forty percent of the high school students, 36 percent of the college students, and 20 percent of the adults, believed that if you applied raw meat . . . preferably a beefsteak . . . to a black eye, the swelling would go down.

Doctors from the Public Health Service say that if you're unlucky enough to acquire a black eye the thing to do with the beefsteak is to eat it—and apply a cold compress to your eye.

It's quite true, they say, that raw meat pressed against a black eye will reduce the swelling. But that is because a raw beefsteak is likely to be cool and moist. Anything else that is cool and moist will do the trick just as well. And a cold compress will do it better and at less cost.

A fallacy that helps explain all these fallacies is the one held by 5 out of each 100 folks queried in this census of superstition. They thought that excessive use of the brain might cause baldness.

WHAT happens to the prices of commodities in a State when resale prices are fixed under the so-called fair trade or resale price maintenance laws is the subject of an inquiry now in progress by the Federal Trade Commission.

In many States, laws have been passed permitting manufacturers to enter into contracts with retailers under which all retailers must charge a minimum fixed price for the manufacturer's product.

Prices go up, some people have said, as the result of these laws. Prices go down, other people say. Prices stay where they are, still others say, or maybe prices go down in some stores and up in others.

To find out just what happens to prices after a resale price maintenance law is passed and enforced, the Federal Trade Commission's economic staff will pursue 3 lines of inquiry.

First, it will examine the products which have been price-fixed. It will find out what they sold for before the price-fixing law went into effect, and then it will check the prices to see what happened after the law went into effect. To furnish a measuring stick, similar studies will be made of competing products whose prices have not been fixed under a price control law.

Prices of course may stand still while quality of an article is changed. Working on the theory that price unrelated to quality has no meaning, the Commission will also compare the quality of products whose prices have been fixed with those that have not had their prices controlled.

Finally, the Commission will try to ascertain just how the demand for price-fixing laws arose, what methods were used to line up support in their behalf, and what methods were used to implement the laws.

Another Battle Against Waste and Want

On three fronts wheat farmers are waging their campaign to insure bread for America, a living for themselves, and soil for the harvests of tomorrow

WHEAT WILL WIN THE WAR! the posters said. But they never said a word about the peace.

War over, wheat farmers along with everyone else settled down to enjoy the prosperity that is supposed to come with peace.

But peace-time prosperity never loomed into sight for wheat farmers.

Wheat bins, overloaded with harvests from war-time acreage, made wheat prices shrink and farm incomes shrivel. With the war won, it looked as if the wheat farmer had lost the peace.

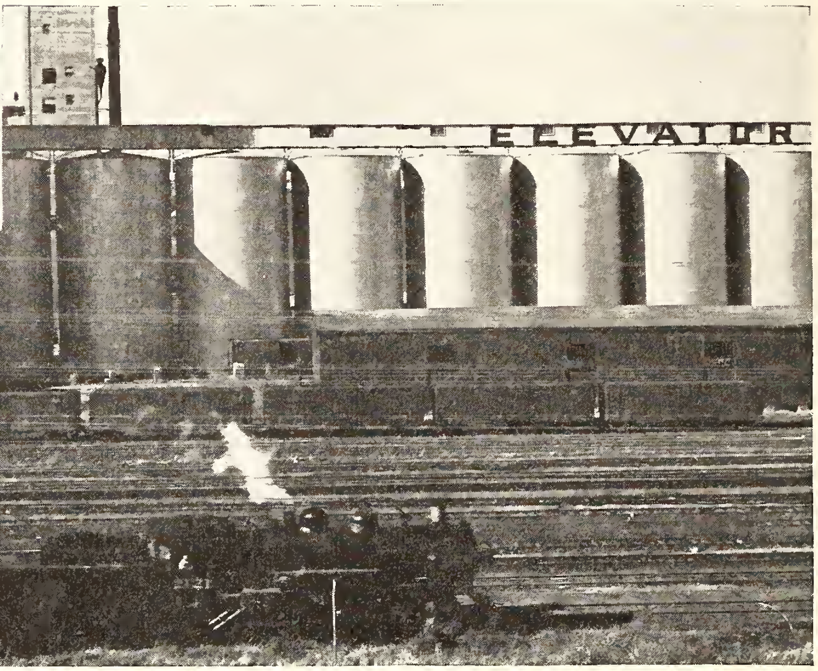
As years of want passed, one after the other, wheat farmers and others turned to the Government for help. In 1929, the Congress tried to give them a hand through an Agricultural Marketing Act, establishing a Farm Board with powers to buy surpluses of farm products. These purchases were intended to bolster up farm prices. In time, however, the mounting supplies left in the Government's hands had just the opposite effect. By 1933, both farmers and Government knew that controlling marketing without adjusting production, was like stopping up a leaky boat by emptying it with a tin can.

A PROGRAM was laid out in the new Agricultural Adjustment Act of 1933. With its passage, the peace tide began to turn. After invalidation of the first AAA by the Supreme Court in 1936, another farm program came into being, followed 2 years later by the present wheat program, as part of the new Agricultural Adjustment Act of 1938. For 6 years wheat farmers have been using their new weapons for the peace-time battle against weather and low prices.

Wheat farmers, fighting for balanced production, adequate income, and lands made safe against winds, rain, and depletion, are following an 8-point strategy in their campaign:

FIRST: Because wheat that cannot be sold beats down all wheat prices and wastes valuable soil, farmers cooperating with AAA are trying to keep a checkrein on production. With the help of AAA, they try to balance production against the amount of wheat which they think that consumers with cash to spend will buy. This they do by cooperatively agreeing on the number of acres they will plant to wheat.

The law says that the powers given to AAA must never be used to encourage farmers to cut down on production so severely



FIRE, tornado, accident, life, and now crop insurance. Wheat farmers may insure themselves through the Federal Crop Insurance Corporation against total loss from crop failure. The Corporation's reserves of actual wheat in storage insure consumers, too, against shortage of grain for bread and cereals.

that they produce less than the amounts that consumers in this country normally buy. That sets a bottom limit to the adjusting which wheat farmers may do with their acres.

SECOND: If an especially big crop of wheat is produced, despite all effort to adjust the number of acres; if this crop is at least a third bigger than the normal amount consumed at home or sold abroad, then wheat farmers have another protection they may use. They can vote to restrict the amount of wheat that may be marketed freely, but at least two-thirds of the farmers voting must agree that this is a good thing to do, before regulations regarding the amount of wheat to be sold go into effect.

THIRD: Payments are made to wheat farmers who take the trouble and go to the expense of conserving their lands. So often in wheat farming, the cheapest and easiest way of farming wastes the soil. Farmers who are hard up have to use the cheapest and easiest way to farm. To help them take care of their land so that the next generation and the ones after that will have productive, tillable soil, the people of this country, through their Government, pay wheat farmers who cooperate an "agricultural conservation payment."

FOURTH: If, in spite of these adjustments, farm income remains below parity, then Congress has provided for a direct cash adjustment in income to help make up the difference. This is called a "price adjustment payment." "Parity price" is the price that will buy as much goods as the price of wheat would buy in prewar years. Price adjustment payments help to recompense wheat farmers when, because there is a great abundance of wheat, the price of wheat gives farmers inadequate buying power.

FIFTH: Farmers, who must sell wheat quickly if they are going to be able to buy shoes and gasoline and other necessities, often have to sell when prices are low. If they could wait until wheat prices climb up, they'd get lots more goods for their money, because farm prices move up and down much faster than the prices of most manufactured goods. To help wheat farmers hold off until prices are better, there are wheat loans they can have from the Government.

SIXTH: Crop insurance, another weapon in the wheat farmer's battle for security, shifts to wheat growers, as a group rather than to the individual grower, the burden and expense of crop losses due to unpredictable weather.

SEVENTH: A Government-aided export plan helps to give wheat farmers better returns for their crops in years when huge world supplies make normal exports unprofitable. To make further exports possible the Government undertakes to help export sufficient wheat to keep the domestic price from dropping to a point where domestic as well as export production becomes distinctly unprofitable.

EIGHTH: Finally, the Federal Surplus Commodity Corporation comes in and buys wheat products to give, free of charge, to the millions of consumers who have no way of buying them, because their incomes also are so wretchedly small.

Taken together, these features add up to an 8-fold program aiming at protection of the Nation's daily bread, and an American standard of living for the Nation's wheat producers.

Keystone of the program is acreage adjustment. Acreage allotment makes it possible for the Nation's wheat farmers to attack this problem cooperatively. It encourages farmers to keep their seedings within the total acreage which may be expected to produce an amount of wheat equal to what consumers normally buy plus the amount of wheat that export markets might be expected to take, plus an additional amount which growers and consumers both need as a margin of safety.

Once this total acreage has been determined for the Nation, it is apportioned among the wheat-producing States on the basis of their previous wheat acreages. Each State's allotment is then divided among the counties of the State on the same basis, except that consideration is also given to the promotion of soil-conserving practices. Within the counties, sharing in acreage allotments by individual farms is managed by the farmers themselves through local committees elected by farmers cooperating in the program.

AS IN ANY DEMOCRACY, the local part of the wheat plan stands or falls with the individual farmer. He can join up or stay out of the allotment program. Only in the case of a national emergency, and not even then until there has been approval by two-thirds of the wheat farmers voting in a national referendum, is the farmer in any way restricted if he decides not to follow the national program.

Taking part in a program means that the farmer agrees to limit his wheat seedings to the number of acres which is his fair share of the Nation's quota. It also means that he will do his part in the job of reclaiming soil that has been exhausted and of conserving soil that is still fertile.

By planting within these allotments, wheat producers in 1939 become eligible to earn 17 cents per bushel on the normal yield of their acreage allotment in the form of agricultural conservation payments, and 11 cents per bushel in the form of price-adjustment or so-called "parity" payments. Price-adjustment payments on wheat are being made for the first time in 1939.

IN ADDITION to receiving these payments, cooperating farmers who plant within their allotments are also eligible for Government wheat loans. In years past, farmers' urgent need for ready cash often forced them to market their wheat direct from the threshing machine. The sudden deluge of wheat often knocked the bottom out of the market. Within a few months prices might return to normal, but not for the benefit of the farmer, for his wheat had already been sold. Now farmers may borrow money on their wheat and market their crop in an orderly fashion whenever during the year prices seem most favorable.

Such loans will soon be made available on the 1939 crop, and will average approximately 75 to 80 percent of the market price of wheat for the last 10 years. Collateral for the loans is the wheat the farmer has raised. When the farmer obtains the loan, he may store the wheat in a sealed bin on his own farm, or he may haul it to town for storage in a commercial warehouse.

MORE THAN 49 million dollars were loaned to farmers on nearly 86 million bushels of 1938-produced wheat. Repayments totaling 19 million dollars had been made by late May of this year, releasing approximately 35 million bushels of wheat to farmers for seed or sale at a higher price.

Wheat loans do over a short period what acreage allotments and balanced harvests do over a longer period. They tend to stabilize the price. Acreage allotments and soil conservation seek the same end in terms of generations rather than years.

But that is not all. By crop insurance, the wheat program brings a share of certainty to an enterprise long the victim of nature's greatest uncertainty, the weather. Insurance, both in theory and in operation, is old. But applied effectively to crops, it is brand new, just now in its first year of operation.

LIFE INSURANCE does not prevent people from dying. Fire insurance does not prevent houses from burning down. But by means of fire insurance a group of people can get together and say, "If anyone of us has his house burnt down, we will all chip in and help pay for a new house. Each of us may pay a little—but we are sure none of us will be ruined."

Crop insurance is like that. But it goes even further. It says to each farmer in the bargain, "You will not have to stand all the loss from crop disasters." Then it turns to consumers and says, "There is a guarantee here for you, and if it works out, there will always be enough wheat to take care of your needs."

Premiums which farmers pay on crop insurance are paid in wheat or in cash. When cash is used the Federal Crop Insurance Corporation takes the cash and buys actual wheat. In this way a reserve is built up to provide for the wheat needs of the country in case there is a year in which the wheat crop fails. It is the Ever-Normal Granary.

By paying to the Federal Crop Insurance Corporation a premium of a few bushels of wheat or its cash equivalent at planting time, the wheat farmer can insure himself against a total loss through crop disaster. He may choose to insure either 50 percent or 75 percent of the average yield of wheat on his farm.

Say a farmer insures his crop, as nearly 170 thousand farmers have done this year, and drought reduces his harvest to one-fourth of his average yield. Assuming that he took 75 percent coverage, as most farmers do, he would notify the Federal Crop Insurance Corporation and it would pay to him—either in actual bushels of wheat or in cash—the difference between what he harvested and 75 percent of the average wheat yield of his farm.

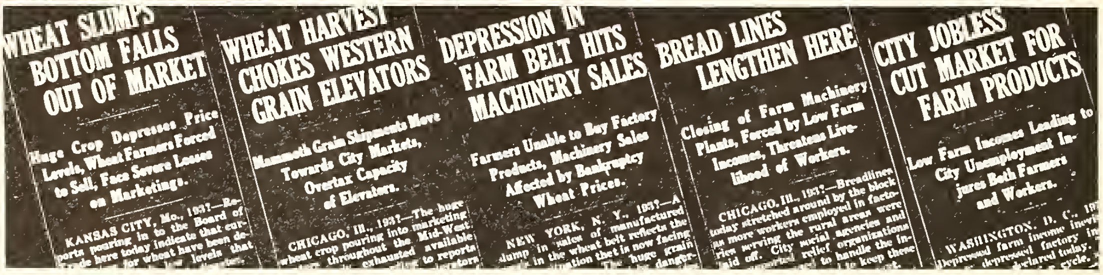
Reserves of the Crop Insurance Corporation, reserves of actual wheat in warehouses, can be tapped. Abundance in fat years is guaranty against shortage in lean years. It is the first big bin in the Ever-Normal Granary, a way by which men can balance their harvests against the caprices and whims of nature.

In doing this the farmer is insured against crop loss. The Nation is insured against a wheat shortage.

FOR CENTURIES wheat has been important in world trade, and for many decades the United States has been one of the chief wheat-exporting countries of the world. Our broad expanse of western wheat land is one

THROUGH the AAA wheat program the American people share with farmers the cost of maintaining soil fertility on the Nation's farms. Soil conservation practices, like the strip farming here, mean land saved for tomorrow's consumers as well as tomorrow's producers.

BREAD lines grow long in cities when the Nation fails to balance production and consumption. To help create the balance of plenty for all, the AAA has launched an 8-point program for wheat farmers. One point is the distribution through the Federal Surplus Commodities Corporation of surplus wheat to families in want.



WHEAT SLUMPS BOTTOM FALLS OUT OF MARKET

Huge Crop Depresses Price Levels, Wheat Farmers Forced to Sell, Face Severe Losses on Marketings.

WHEAT HARVEST CHOKES WESTERN GRAIN ELEVATORS

Mammoth Grain Shipments Move Towards City Markets, Overtax Capacity of Elevators.

DEPRESSION IN FARM BELT HITS MACHINERY SALES

Farmers Unable to Buy Factory Products, Machinery Sales Affected by Bankruptcy Wheat Prices.

BREAD LINES LENGTHEN HERE

Closing of Farm Machinery Plants, Forced by Low Farm Incomes, Threatens Livelihood of Workers.

CITY JOBLESS CUT MARKET FOR FARM PRODUCTS

Low Farm Incomes Leading to City Unemployment Injures Both Farmers and Workers.

of the natural "bread baskets" of the world. Consequently, the American wheat producer, like the producer of many other agricultural commodities, needs not only the American market but also an adequate export outlet. For many years he had such an outlet—particularly during the World War, when Allied armies depended heavily upon him.

But things changed after the war. Tariffs and trade barriers were erected around what had been open markets. Competition for the world wheat market intensified. American wheat was in danger of being forced out of world trade.

TO MEET this situation, the current program undertakes to assure the American producer a fair share of the world market through a wheat-export program. The Federal Surplus Commodities Corporation buys wheat from producers at domestic prices, and sells it to exporters at a price which enables them to meet world competition.

During the first 11 months of the past marketing year, a total of 112½ million bushels of wheat was exported from this country, 88 million bushels with the help of the Federal wheat-export program. Such results show that in the face of increased world competition and higher import barriers, the United States can hold its fair share of the world trade for the producers of an important export commodity. And the sale of 88 million bushels of wheat through the Federal export program resulted in better prices for the whole 1938 crop.

Estimates indicate that without the AAA program, farmers would lose not only their payments and opportunities to obtain loans, but also would very likely be forced to sell their wheat at prices much lower than present United States market levels.

NOR ARE the needs of America's underprivileged consumers overlooked. From July 1, 1938, to May 31, 1939, the Federal Surplus Commodities Corporation distributed the equivalent of nearly 6½ million bushels of surplus wheat to needy consumers eligible to receive this assistance. Wheat is one of the surplus commodities for which wider use is now being sought through the "stamp plan" method of distribution.

These, then, are the weapons of the battle which wheat farmers are waging against weather and want.

NO BATTLE of this size or seriousness could be waged by farmers alone. Allied with the farmers are the consumers of the Nation who are supplying farmers with ammunition, in the form of cash payments through the Federal Treasury and in the slightly higher prices paid for wheat products. This year wheat farmers are receiving $153,000,000 in "agricultural conservation payments" and "price adjustment payments." This represents an investment by consumers in the land and the people on whom consumers must depend for their daily bread and to whom city workers must sell their products if wages are to be decent.

Against the cost of the wheat program, too, there should be placed the alternative costs of neglect. When impoverished farmers are not cared for, farms are lost; farm implements and land deteriorate; farm families suffer malnutrition and illness; city workers lose markets for their products.

Millions invested in preventing such things can be cheap.

FARMERS' SHARE of consumers' food dollars in 1938 was the smallest in 4 years. Out of every dollar consumers spent for 58 important foods, 40 cents went into farmers' pockets last year; 45 cents in 1937; 44 cents in 1936; 42 cents in 1935. When food was cheapest—back in 1932–33, farmers got 33 to 35 cents out of each consumer food dollar. When food was most expensive, during the "prosperity" days of 1925–29, the farmers' share was 47 to 48 cents.

Between the price consumers pay and the price farmers receive are all the costs and profits of processing, transporting, and marketing these 58 foods.

They Sell Gasoline by Grade

North Carolina takes some of the gamble out of buying

A **LESS GUESSING** and more wise spending is what North Carolina motorists are doing as the result of a State law which requires all gasoline sold in the State to be quality graded.

Advantages to motorists are exactly those that consumers enjoy when they buy Government-graded meat. They know they are getting the quality they pay for. And a minimum quality standard for the lowest grade of gasoline sold in the State assures them that they won't clog up their motors with adulterated or substandard gasoline.

Consumers don't have to own an unabridged dictionary to look up the adjectives used in describing gasoline and they don't have to worry about how much extravagant claims for different brands should be discounted.

All they need to do is know what grade of gasoline they want. The State grading system then offers them an opportunity to drive out and buy that grade at the best price available.

GASOLINE in North Carolina comes in 3 grades: "North Carolina Premium," the highest grade; "North Carolina Regular," the second grade; and "North Carolina Motor," the lowest grade.

Specifications for the grades were worked out by the chemists of the North Carolina Gasoline and Oil Inspection Division of the State Department of Revenue. They are based upon a number of chemical tests which assess such technical matters as the distillation range of the gasoline, its tendency to corrode, its sulphur content, its vapor pressure, and its gum content.

Depending upon the kind of car they drive, motorists can decide for themselves which of the 3 grades of gasoline is most economical for them to use. The lowest grade, "North Carolina Motor," for example, is not suitable for automobiles with high compression motors.

This gasoline, however, must be free of water and suspended matter; it must have an octane rating of at least 60, and it must not contain more than a stated amount of gum and sulphur. "North Carolina Regular" gasoline must meet higher standards, and has an octane rating of 68. The Premium gasoline must score even higher and it must have an octane rating of 75.

SO CONSUMERS may know just what the difference between the grades is, the North Carolina State chemists explain that octane rating is the measure of a gasoline's tendency to cause motor knocks, the higher the rating, the fewer the knocks. Gum in a gasoline makes the valves and pistons stick while excessive sulphur corrodes an automobile engine.

Gasoline destined for North Carolina automobiles is graded originally at the refineries. And since most North Carolina gasoline comes from Texas, this is done by the oil companies in Texas. Steel tankers carry the gasoline from Texas through the Gulf of Mexico and up the Atlantic Coast to North Carolina where it is pumped into huge storage tanks on shore. Here the gasoline is drawn out of the tanks and shipped to key distributing tanks all over the State. From these tanks the gasoline is shipped to the retail stations.

Inspection of gasoline begins with its arrival in the State. Samples are drawn as soon as the gasoline is pumped ashore which are tested to see if they check with the grade

THIS CONSUMER who lives in the District of Columbia isn't as lucky as North Carolina motorists who don't have to guess when they make their gasoline purchases. Three official North Carolina grades for gasoline assure them that they are getting the gasoline quality they are paying for. In the District of Columbia gasoline is not sold under Government grade.

claimed for the gasoline. Gasoline which does not meet the requirements for the lowest grade may not be sold in the State at all.

Testing does not stop here, however, because as time goes on gasoline quality may change. More samples are drawn from the wholesale distributing tanks through the State. Then when the gasoline is finally distributed to retail gasoline stations, it is subject to further testing.

CHEMICAL LABORATORIES on wheels are the scenes for the final checkup on gasoline quality. Five chemical patrols, each one consisting of a trailer laboratory with a crew of chemists and inspectors, police the gasoline sold in the State. The traveling laboratories drive into a city and park. Then with the trailer as their headquarters inspectors scout out the gasoline situation. They go from gasoline station to gasoline station in the vicinity taking samples of the gasoline sold from every pump. These samples are then tested in the trailer laboratories, while duplicate samples are expressed to the State chemical laboratories in Raleigh.

In case the trailer test shows that a gasoline does not measure up to its purported grade, the inspector on the spot prevents further sales. If the results of the trailer tests are verified in Raleigh, a telephone call to the inspector in the area instructs him to seal the pump containing the offending gasoline.

Only two and one-half hours elapse between the time a sample of gasoline is taken and the tests are run off in the trailer.

So that the grade and price of gasoline can be identified by motorists on the road, pumps selling the different grades of gasoline are marked with distinguishing colors. The "premium" grade is identified by a label with a blue design on a white background, the "regular" grade by red designs on a white background, and the "motor" grade by black designs on a yellow background.

JUST HOW useful the grading law can be to consumers if they make good use of it, is illustrated in a survey the Gasoline and Oil Inspection Division made recently in Raleigh. A 4-month checkup showed that North Carolina "Regular Grade" gasoline sold at prices which ranged from 16 2/3 cents a gallon to 21 3/10 cents a gallon. But whether consumers paid the top price for the grade or the bottom price they got the same quality gasoline.

That is what the State of North Carolina is doing to assure motorists of a dollar's worth of gasoline quality for every dollar's worth of legal tender they spend.

CHECKING gasoline quality and quantity, the North Carolina Gasoline and Oil Inspection Division maintains a fleet of trailer laboratories manned by crews of chemists and inspectors. When a pump is inaccurate or a gasoline fails to come up to its advertised grade the gasoline pump is sealed to prevent further sales.

In addition, the Gasoline and Oil Inspection Division makes sure that motorists ask full measure for the money they spend.

Back in 1936 a survey was made to determine just how effective was the State's weights and measures law (passed in 1926) in protecting gasoline purchasers. Immediately it was learned that a failure to supply the State Weights and Measures Division with enough money to enforce the law had almost made it a dead letter so far as protecting motorists went.

TAKING the measure of this situation, the Gasoline and Oil Inspection Division lined up a 4-point program for itself. In point No. 1 it resolved to maintain a rigorous inspection of all gasoline dispensing devices. In point No. 2 it determined to educate gasoline station operators to the benefits that can be derived from accurate measuring devices. In point No. 3 it resolved to educate gasoline station attendants in the proper methods of adjusting pumps. And in point No. 4 it took on the man-sized job of educating the general public so that it would appreciate the necessity of efficient weights and measures enforcement.

In the first year of the new order the Division inspected 33,642 gasoline, kerosene, and oil measuring devices and found that 6,307, or 18.7 percent, were inaccurate. Almost 30 percent of the gasoline pumps inspected were faulty.

In the first 6 months of the second year of its campaign, the Division inspected 16,509 measuring devices for the sale of gasoline, kerosene, and lubricating oil. It found 16.1 percent defective, somewhat of an improvement over the first year.

When a pump is so far out of whack that it can't be repaired, it is confiscated and destroyed. When it can be repaired, it is tagged conspicuously, "Condemned for Repairs." Not until the pump has been repaired and reinspected can it be used again.

When pumps come up to specifications and deliver an honest measure their measuring units are sealed to prevent tampering and they are tagged, "Inspected and Approved."

Cincinnati Consumers Go to Town

BALANCING its books for the year, the Consumer Conference of Greater Cincinnati announced recently that the credit side of its ledgers is well filled.

Since it was organized in 1934, the Conference has won for consumers in Cincinnati the adult right to sit at the council tables with other important interests in the city—industry, trade, and labor.

Conferences benefiting all the participants have been held between consumers and retailers, wholesalers and manufacturers, under the consumer organization's sponsorship.

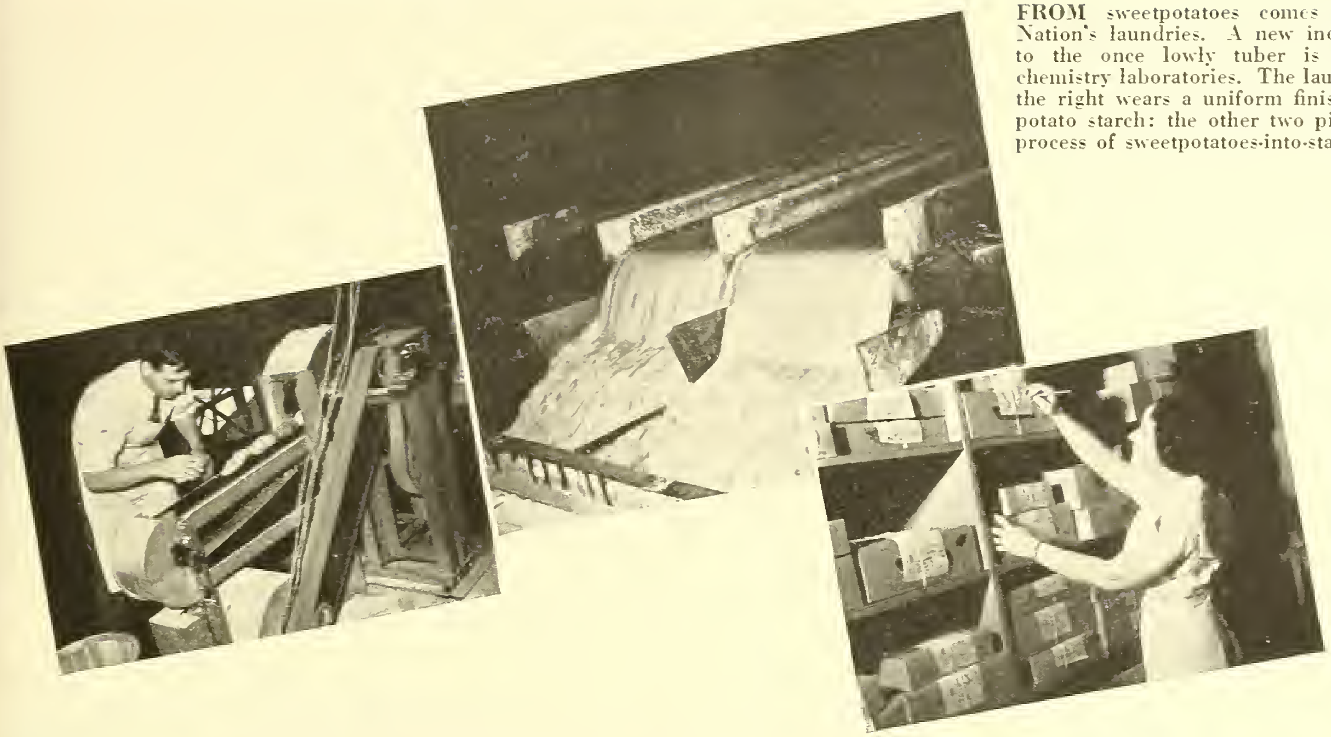
It has presented 90 weekly radio programs. It has conducted 56 regular consumer discussion conferences.

Delegates from the Conference have attended a variety of gatherings, of the kind that ordinarily discuss matters of importance to consumers—but to which consumers ordinarily are not invited. These include a meeting of retail grocers and butchers, a convention of department store administrators, and a dry cleaners' meeting.

The conference is cooperating with other civic organizations to get a smoke abatement ordinance passed.

Working on its continuing program, the Conference has sought to educate consumers in the quality of the merchandise they buy. It has supported consumer legislation, in the city, the State, and the Nation. It has sought to secure informative labels on commodities, labels that would be helpful to both business men and consumers.

In a year the Conference was responsible for pushing the purchase of Government-graded meat for consumers up to a point where Cincinnati is among the first 10 cities in the country in the amount of quality-graded meat it consumes. Until the Conference began this work, not a pound of graded meat had been sold in Cincinnati.



FROM sweetpotatoes comes starch for the Nation's laundries. A new industry dedicated to the once lowly tuber is emerging from chemistry laboratories. The laundry checker on the right wears a uniform finished with sweetpotato starch: the other two pictures show the process of sweetpotatoes-into-starch.

New Uses for Old Products

While farmers seek to get a fairer share of consumers' dollars by adjusting their production, scientists in laboratories are helping to increase farmers' income by finding new ways to utilize old products and prevent waste. Science alone cannot solve agriculture's problems, but it is showing how it can help

FARMERS OF THE FUTURE have their eyes on chemical laboratories as well as grocery stores.

Chemical research has found ways in which agriculture, in addition to feeding and clothing the Nation, may provide raw materials for many industrial products. The search for new industrial uses for farm products is being vigorously pushed.

To the consumer the application of chemical science now means starch for his shirts from sweetpotatoes; the steering wheel of his car from soybeans; maybe some day fuel for his car from corn or his suit of clothes from a forest of pines.

Ten years ago chemical research on industrial use of farm products was still in its toddling stage. Up to now it has hardly managed to get one foot out of the laboratory into the factory world. Trace your finger back on the calendar until you reach the years of the war. Stop there. During the war years this country was cut off from essential raw materials that went into many of our industrial products. In scattered laboratories worried scientists began to look for substitutes for these raw materials—not so much to grow two plants where there had previously been one, but to unravel the mysteries of that plant and to put it to greater industrial uses.

The 20's brought a new type of farm problem—the problem of surpluses. Wheat, cotton, grains piled up in warehouses as we changed from a debtor to a creditor nation status and American agriculture found itself in the "post-war depression" years.

Problems of surpluses persisted, and as the 20's rolled into the 30's, the Nation's farmers began to understand the economic implications of the "paradox of plenty." Scientists in private and Government laboratories began looking more eagerly than ever for new uses for those surpluses, to make fuel out of grains, plastics out of wood, paints and varnishes out of soybeans, roads out of cotton.

Man did not wait for the development of industry and science when he first began to use agricultural raw material for purposes other than his dinner table. By accident or by the crude experiments of the alchemist, he knew that paper or parchment could be made from plant fibers, that sails for his boats could be made from the same plants. The savage in the jungle made his paints and dyes from vegetables, and mixed his own medicines from vegetable growths he grew to recognize. No one knows who was the first to discover that leather, glue, candles, and soap could be made from animal by-products and wastes.

LAST YEAR Congress appropriated 4 million dollars for the construction of 4 regional laboratories in the United States to be devoted solely to developing new uses for our major farm crops. Today steam shovels are at work on the foundations of the first of those laboratories; in about a year research will be going forward in all four.

Consumers already are reaping the benefits of research undertaken since the war. Starch is being produced in ever-increasing quantities from sweetpotatoes. The Southern pine has been hailed as a native source for newsprint, and a great new industry is prophesied for the South. In the West, filling stations have sold motor fuel made from corn and other grains.

The soybean is an old story; from this Oriental stranger to our shores has grown a new kind of farm product that goes to the Nation's dinner tables and onto its automobiles, into the paints and varnishes used by home and industry, into plastics ranging from ash trays to desks, and into a hundred and one other things that make Aladdin's genii of the lamp look like a four-flusher.

THE PRESENT is exciting enough; but it is to the future that scientists point when they speak of this new science. In the Nation's laboratories today research is going forward, products are being developed, a new era is being unfolded for agriculture. The farmer looks anxiously toward these laboratories and at his storehouses and asks: "Will it give me new outlets for my products?" The industrialist sits at the conference table and asks: "What new fields for business does science promise?" The consumer's eye roves over the store counter and asks: "Will science bring me new products, cheaper and better than those that I have been buying?"

TO ALL these questions the answer is "maybe." Oftentimes a process is developed for making a new industrial product from agricultural raw materials, but the cost of producing it is found to be too high; competing products could easily outsell it in the market. Or else the product, under tests, is found to be unsatisfactory and the scientist must start all over again. Or maybe the new process is filed away until the time when present sources for industrial products are near exhaustion. Science shies away from the spectacular or the dramatic. It does not like the limelight when it is not sure of success. That is why years are required for the perfection of a process that may have been developed overnight. And that is why, too, that science hesitates to predict what may develop a year or a decade from now.

In this article and in the one to follow, we tell of the present status of the research, of the things already accomplished, and of the discoveries that may be part of the future.

CONSIDER COTTON. There is in this country today a surplus of 11 million bales of cotton. A surplus of that size is a danger to the present and a threat to the future of cotton growers.

Chemists know how to make explosives out of cotton, just as they can make paper, plastics, motion picture films, and a hundred other products from the fiber. But most of these things can be made from other raw materials at a lower cost, so there is little present reason for scientists to waste their time on such research.

Cotton has industrial possibilities when used as a fiber. For instance, roads are now being built with cotton, the cotton fiber acting as a "brace" to hold intact the tar or asphalt of the highway. Cotton is used as a housing material, an insulator, as twine for tying mail, as a fiber to make mesh bags for shipping fruits and vegetables. Experts are experimenting with cotton as a fireproof and waterproof fabric for construction work. Already a southern mill has produced a million cotton coverings for cotton bales to replace the heavier type of covering used in the past.

FROM COTTON LINTERS—the fiber left on the seed after the cotton is removed at the gin—have come paper, insulation, phonograph records, plastics, and even fountain pens. Cottonseed has been used for many years for its valuable oil, from which are made margarine, salad dressings, soaps, candles, fertilizer, oilcloth, and even a form of "cotton rubber."

Today 40 percent of our cotton is going into "industrial uses," the remaining 60 percent going for clothing and shelter. Research is going forward on those industrial uses, such as the work on a more durable cotton fabric for tires of high speed trucks and buses, research on cotton mats for "curing" concrete, development of cotton cords for parachutes to replace those now made of the more costly silk. And, of course, ways have been found to make wider use of cotton in summer clothing, hosiery, curtains, and other types of clothing and household goods.

Cotton linters have long been used for padding and stuffing in upholstery. Now chemists are peering into the chemical family trees of the linters, and have developed a major source of cellulose from them; cellulose from linters forms the basis for 2 of the 3 major types of rayon produced in this country. From cellulose also come cellophane, plastics, films, lacquers, insulation sheets, finishings on leather and textiles, and a hundred and one other products.

MILK is a product whose byproducts loom large in the industrial picture. Skim milk, whey, and buttermilk are the major milk byproducts in creameries and cheese factories. The farmer, it is estimated, produces 53 billion pounds of skim milk annually. Nearly all of it goes into animal feed pens; a small amount actually is destroyed.

Science is looking into the milk situation and is emerging with products from milk that range from the chassis on your radio set, to a new kind of candy for your sweet tooth.

Skim milk contains casein. Properly processed, casein makes excellent glue, paper and textile coatings, paints, and plastics. On the market today are buttons, costume jewelry, umbrella handles, and similar articles whose basis is in a form of casein from skim milk.

Chemists have but recently discovered how to make a synthetic fiber from casein that in many respects resembles natural wool. Such fibers are being produced on a commercial scale in several European countries; commercial production in this country is still lagging. The scientist hesitates to make promises, but tomorrow may see the use of skim milk to supplement domestic supplies of real wool.

Buttermilk—nearly 2 billion pounds of which annually are given to animals—is put through the scientific mill and comes out paint. That is its major nonfood use now, other than conversion into animal feeds. But work is still going forward on getting the valuable casein from the buttermilk.

WHEY—a byproduct of cheese and casein manufacture—is rich in food values, particularly in Vitamin G and in protein, calcium, and phosphorus. Animals have been getting most of these food values. Seven billion pounds of whey are given to animals or wasted annually. But the chemist is out to corral its nutritional assets for human consumption.

In the laboratories of the Bureau of Dairy Industry of the Department of Agriculture, chemists will give you fudge, chocolate, and what some punster-scientist has dubbed "wheyfers." Here is candy which is one-third and more whey, yet tasting just as good but not so sweet as the candy that is made with whole milk.

Also in these laboratories are canned soups with whey substituted for milk and cream. Fruit whips made with whey can't be told from the usual product on store shelves. As a beverage by itself, whey does not find favor because of its peculiar taste, though Samuel Pepys did find it a pleasing drink when he went "to the whey house and drank a great deal of whey."

Some whey is used for medicinal purposes and for children's foods, mostly because of its high lactose content.

In the past 5 years scientists have been able to produce lactic acid from whey at low cost. Lactic acid is used in the leather industry, and in the preparation of pickles, soft drinks, and sherbets. It is also used as a solvent for lacquer and resin, while the rapidly growing plastics industry makes great use of the acid.

YOU may not believe it, but a surprising amount of the Nation's laundry, thanks to the scientist, comes home today finished with starch made from sweetpotatoes.

America imports a quarter of a billion pounds of starch annually for use in finishing fabrics, in puddings, glue, dextrin, candy, and many other products. Now a new industry is springing up in the South that will give the farmer a new market for his sweetpotatoes and lessen the dependence of this country on foreign sources of starch. A cooperative plant at Laurel, Mississippi, is producing over 1½ million pounds of the starch annually from sweetpotatoes. There is room for 150 more plants of the same size to make as much root starch as we import, according to the Chief of the Bureau of Chemistry and Soils.

Not the least of the markets waiting for the enterprising manufacturer of sweetpotato starch is the United States Government. Tests have shown that mucilage for stamps and envelope flaps made from sweetpotato starch is as good as the imported cassava starch used today. The picture of a man wearing a shirt freshly starched with sweetpotatoes and sealing an envelop with adhesive made from that same vegetable is no bit of scientific fantasy, but a reality of today.

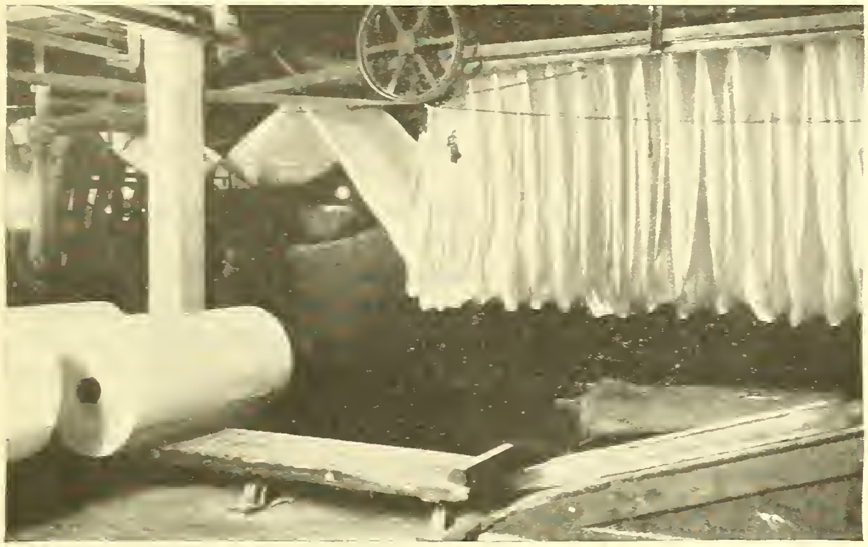
SOYBEANS came to this country from the Orient over a century ago. They have been amazing scientists ever since. From 1925 to 1937 production of the bean in this country has increased 8 times, from 5 million bushels to 40 million bushels. Today soybeans go into paints, enamels, varnish, glue, printing ink, linoleum, plastics, shortenings, margarine, foundry cores, livestock feeds, flour, various types of foods and beverages—and the scientists say they have just started!

Yachtsmen swear by the paint, made from soybean oil, that they use on their boats. The modern automobile has ash trays, gear-shift knobs, steering wheels, horn buttons, light and ignition switches, all with their origins in the lowly soybean. Soybean varnishes are claimed to be among the best, and soybean plastics are said to be tougher and more durable than other plastics.

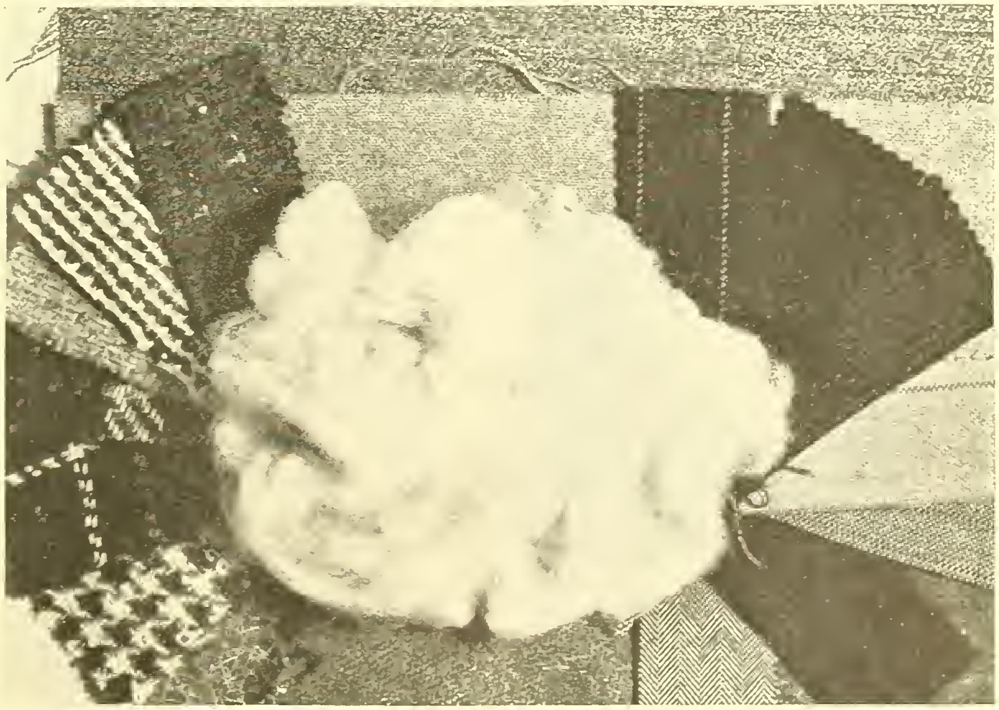
With all these developments, the future of soybeans in industry is still said to be just on the verge of going places. An ambitious program has been mapped for future research on the bean and the oil that is derived from it. The soybean has been called the "wonder bean." Whether the wonders that have been predicted for it will come true depends—like all this research—on the success of industry in adapting the discoveries of the laboratory.

●

In our next issue we will tell more of the ways science is working to find new uses for agricultural products.



ALMOST 50 billion pounds of skim milk are fed to animals or destroyed every year. Now chemists predict that textiles and fabrics may soon be made from this milk byproduct. Below are samples of synthetic "wool" fabrics whose origin is in the casein of skim milk. At the left, paper is being coated with casein.



COOPERATION

THERE ARE few impartial studies of the efficiency of consumer cooperatives. It seems to be agreed on all sides that cooperative enterprises can, in the long run, achieve only such a place as their efficiency in distribution earns for them. Therefore studies of their operating expenses, and comparison of those expenses with the records of private enterprises, are needed.

Almost the first authoritative study of this kind has now come from the Bureau of Business Research of Harvard University's Graduate School of Business Administration. It is called "Operating Results of Consumer Cooperatives in the United States in 1937." The study, say its authors, has been concerned with operating results only—with margins, expenses, and profits. They have not attempted "an appraisal of consumer cooperatives as contrasted with other forms of business organization," or sought to evaluate any of the intangibles of cooperative enterprise.

Three types of consumer co-ops were studied, and detailed figures for each type are set down separately. First discussed are food store cooperatives, mostly serving urban communities. Second are the cooperative general stores, located in small towns or at country crossroads, and serving chiefly farmers. Third are farmers' purchasing associations, often connected with farm organizations, and dealing in farm supplies, and frequently in petroleum products.

Returns from 42 cooperative food stores were analyzed. Sixteen of these were in the New York area; 16 in the Chicago area; and 7 in the Superior, Wisconsin, region.

Sales per store averaged $50,000. Thirteen of the 42 stores reported net losses during the year; all but one of those reporting losses had sales of less than $48,000. It appears, says the study, "that, under the conditions of 1937, a cooperative had to secure average sales of about $4,000 a month, or between $900 and $950 a week, before it could expect a fairly secure profit for the year as a whole from merchandising operations alone."

Margins, various items of expense, and gains are considered for the 42 food stores as a whole. There is also a breakdown of these figures for the 9 most profitable enterprises in the group; for stores having sales of less than 25 thousand dollars a year, for those with sales between 25 and 75 thousand dollars a year, and for those with sales of 75 to 200 thousand dollars. Finally there is a breakdown of the figures according to the population of the town or city in which the stores are located; and a comparison of the figures for Eastern and for Midwestern establishments. Since only 42 food stores reported in the survey, the analyses for these various smaller classifications of food stores should be used with caution.

Gross margins (net sales minus the total net cost of merchandise) for all 42 stores averaged 18.5 percent of sales. For the 9 most profitable stores, margins came to 19.6 percent. Salaries and wages for all the stores were 9.6 percent of sales. Rent, heat, light, and power amounted to 2.55 percent. Advertising costs were 0.35 percent. Educational expenses of the co-ops, however, were listed as "unclassified" expenses; and no part of them was included under the heading of "advertising."

Total operating expenses before interest, for the food co-ops, came to 16.6 percent. Adding a charge for interest on the cooperatives' owned capital brings total operating expenses up to 17.6 percent of sales.

Profit from merchandising operations alone came to 0.9 percent. With other sources of income, from what are defined by the Bureau as "nonmerchandising operations," including the savings on interest-free capital, final net gain was 2.3 percent of sales.

Net gain, explains the Bureau, is "the figure which many merchants, bankers, and accountants have in mind when they speak of net profit, net business profit, or net earnings." It is this figure, of course, upon which cooperative societies base their patronage refunds—the typical method by which consumer cooperatives divide their gains among member-users.

A major problem in grocery store operations is the influence of meat sales upon the business. Nineteen of the 42 food stores reported relatively high percentages—30 percent or more of their total sales—in meats. Comparable figures for stores handling little or no meats were not obtainable.

The Bureau hazards the guess that "substantial emphasis on meats tended not only to increase sales volume, but also to bring about higher rates of margin and of expense . . ."

Another conclusion which the report tentatively offers is "that meats are somewhat more difficult to handle at a profit than groceries, and that the managers of cooperative stores have not yet solved the problems peculiar to the handling of meats."

Margins and expenses for the 42 food cooperatives were not very different from the results shown by either privately owned independent stores or chain stores. Significant summary of the report, as far as food retailing goes, is this:

". . . any important contribution of cooperatives to the welfare of consumers which is made through lower prices or greater values does not arise from operating efficiency in the retail stores greater than that for private enterprise. This does not mean that cooperatives cannot give better values than privately owned businesses; but it indicates that such better values, if given, probably must reflect:

"(*a*) Advantages secured in wholesaling or in manufacture, possibly through private branding, coupled with a scrupulous regard, in product specifications, in labeling, and in pricing, for the interests of consumers; and

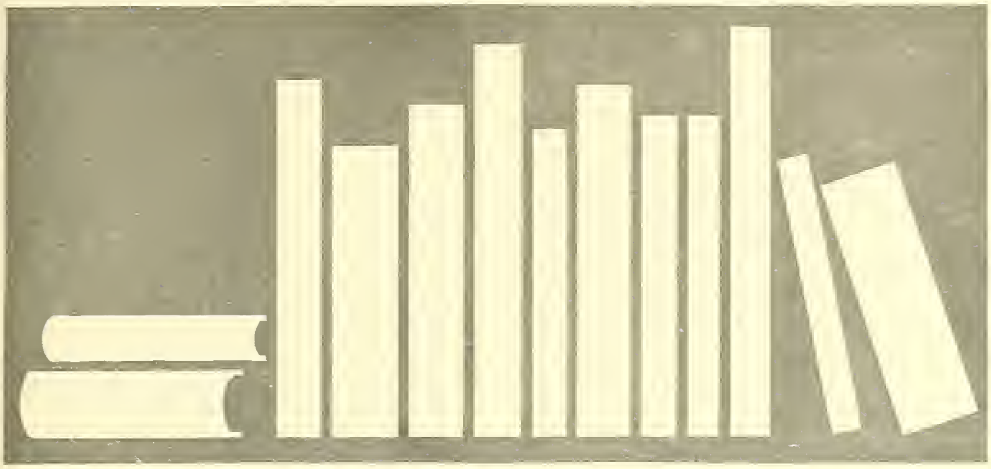
"(*b*) A distribution of retail profits."

TWO NEW COURSES at the Eastern Cooperative League's fifth annual Summer Institute at Amherst, Massachusetts, deal with "How to develop a first-aid-for-housewives program" in a local consumer cooperative, and "How to handle publicity and public relations."

The first special course, under the direction of the dietitian of the regional wholesale society, is designed to train leadership for "Better Buyers' Clubs" in the local co-ops. This course includes information about cooperatively labeled products and their use in the home; how to run grading demonstrations, and conduct shopping tests.

Other courses, following along the lines of previous years, take up discussion leadership and public speaking; the principles and history of the consumer cooperative movement; organization methods; problems of store operation; and financial administration.

After the general course, a second week's intensive work on management problems is given, chiefly for store managers.



CONSUMERS' BOOKSHELF

FAMILY INCOME IN FOUR URBAN COMMUNITIES IN THE PACIFIC NORTHWEST REGION 1935–36, Volume I—Study of Consumer Purchases: Urban Series, Bureau of Labor Statistics, U. S. Department of Labor. Bulletin 649. 1939, pp. 297. Address: Superintendent of Documents, Washington, D. C. 35 cents.

TOWARD FARM SECURITY, by A. G. Black, former Chief, Bureau of Agricultural Economics. U. S. Department of Agriculture Miscellaneous Publication No. 308. 1938, pp. 23, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Examines the efforts of American farmers to achieve stability of farm prices and incomes, protection against crop losses, and security of land tenure and land values. Also considers some of the problems of farm laborers.

THE FARM-HOUSING SURVEY, directed by the Bureau of Home Economics in cooperation with the Bureau of Agricultural Engineering and the Extension Service. U. S. Department of Agriculture Miscellaneous Publication 323. 1939, pp. 42. Address: Superintendent of Documents, Washington, D. C. 15 cents. This report is based on a field study of farm dwellings, their equipment and need for improvements. This publication is made up for the most part of statistical tables giving detailed information about the physical conditions of farm homes as revealed by the census of Agriculture in 1935 and the Civil Works Administration study of a 10 per cent sample of the farm dwellings in each State.

EDUCATING THE CONSUMER. A symposium. Reprint from the Journal of Home Economics, Vol. 30, No. 9. November 1938, pp. 617–631. Address: The American Home Economics Association, Mills Building, Washington, D. C. 10 cents. Contains articles expressing contrasting points of view on consumer education. (1) Wherefores of Consumer Education, by Jessie V. Coles, Professor of Home Economics, University of Missouri. (2) The Retailer and Consumer Education, by Saul Cohn, President of the National Retail Dry Goods Association. (3) Joint Progress of Home Economics and Advertising, by Howard W. Dickinson of the American Association of Advertising Agencies. (4) The Home Economist in Business Regards the Education of the Consumer, by Dorothy E. Shank, home economist employed by a business firm. (5) Case History of a Consumer, by Ruth Wilson Tryon, a homemaker. (6) What High School Students Know About Buying and Money Management, by Kenneth B. Haas, U. S. Office of Education.

A STATISTICAL HANDBOOK OF FARMERS' COOPERATIVES, by U. S. Farm Credit Administration. Bulletin No. 26. 1938, pp. 330. Address: Superintendent of Documents, Washington, D. C. 35 cents. Lists and discusses the major types of marketing and purchasing cooperative associations, placing special emphasis on their volume of business, membership, and management problems related to financing.

WHAT EVERY PERSON SHOULD KNOW ABOUT MILK, by Leslie C. Frank, U. S. Public Health Service. Supplement No. 150 to the Public Health Reports, superseding Reprint No. 1659. 1939, pp. 10. Address: Superintendent of Documents, Washington, D. C. 5 cents. Discusses the values of milk as a food, and methods for safeguarding it to prevent it from transmitting disease. Explains model uniform regulations for milk control prepared by the National Advisory Board of the U. S. Public Health Service.

THE PASTEURIZATION OF MILK, by C. J. Babcock, Bureau of Dairy Industry. Leaflet No. 177. 1939, pp. 4. Address: Office of Information, U. S. Department of Agriculture, Washington, D. C. Free. Describes the status of pasteurization of milk in this country. Explains the value and necessity of pasteurization in safeguarding our milk supply.

MOTOR FUELS FROM FARM PRODUCTS, by P. B. Jacobs and H. P. Newton, Bureau of Chemistry and Soils. U. S. Department of Agriculture Miscellaneous Publication No. 327. 1938, pp. 129, illus. Address: Superintendent of Documents, Washington, D. C. 15 cents. Considers the agricultural, technical, and economic aspects of obtaining motor fuels from farm products. Includes statistics on the annual production and geographic distribution of various farm crops suitable as raw material for producing motor fuels. References.

PLANS OF FARM BUILDINGS FOR WESTERN STATES. U. S. Department of Agriculture Miscellaneous Publication No. 319. 1939, pp. 120, illus. Address: Superintendent of Documents, Washington, D. C. 60 cents. Presents illustrations and construction details for various farm buildings such as houses; barns; cattle, sheep, and hog shelters; and storage buildings. Describes briefly suitable types of equipment for these buildings.

WELL-NOURISHED CHILDREN. Folder 14. 1939, pp. 16. Address: Children's Bureau, U. S. Department of Labor. Free. Discusses the food value of various types of foods for children. Methods of forming good food habits and other factors assuring adequate nutrition are considered. Contains list of Government publications on child care and feeding.

CONTAINERS FOR FRUIT AND VEGETABLES, by L. C. Carey, U. S. Bureau of Agricultural Economics. Farmers' Bulletin No. 1821. 1939, pp. 64, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Discusses various types or classes of containers and the necessity for their standardization by law.

RURAL ZONING AND YOUR COUNTY, by Bureau of Agricultural Economics, U. S. Department of Agriculture. 1939, pp. 15, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents. Treats of the advantages of rural zoning and the economy of good land use as contrasted with scattered farmsteads on poor land where families are bankrupting both themselves and their communities. A sample rural zoning plan is included.

HOMEMAKING. 1938, pp. 25. Address: Illinois Congress of Parents and Teachers, 6 North Michigan Avenue, Chicago, Ill. 10 cents. This bulletin is designed to aid homemaking chairmen of local parent-teacher associations in planning programs, study classes, and exhibits. One section presents brief outlines for 5 lessons dealing with consumer problems such as (1) advertisements as educational material, (2) labeling of food products, and (3) the purchase of meat, milk, textiles, clothing, and hosiery.

CO-OPS IN AGRICULTURE, by French M. Hyre. Circular C–111. 1939, pp. 23, illus. Address: Director of Information and Extension, Farm Credit Administration, Washington, D. C. Free. Contains a brief discussion of the types, importance, and extent of cooperative associations in American farm business. Statistical information is based on data assembled in a recent nationwide survey of farmers' cooperatives.

HOUSING REQUIREMENTS OF FARM FAMILIES IN THE UNITED STATES, by Maud Wilson, Bureau of Home Economics. U. S. Department of Agriculture Miscellaneous Publication No. 322. 1939, pp. 40. Address: Superintendent of Documents, Washington, D. C. 10 cents. Discusses the general requirements and the need for special planning of farmhouses based on a national survey of the farm housing situation. Information on regional variations in housing requirements of farm families and desirable features for comfort and convenience in farmhouses are presented.

FAMILY INCOMES IN CHICAGO (1935–36), Volume I—Study of Consumer Purchases: Urban Series, by Bureau of Labor Statistics, U. S. Department of Labor. Bulletin 642. 1939, pp. 210. Address: Superintendent of Documents, Washington, D. C. 25 cents. This booklet and the one following are the first of a series of publications based on the Consumer Purchases Study which is being conducted by the Bureau of Labor Statistics and the Bureau of Home Economics.

AGRICULTURAL ADJUSTMENT 1937–38: A Report of the Activities Carried on by the Agricultural Adjustment Administration from January 1, 1937, through June 30, 1938. 1939, pp. 385. Address: Superintendent of Documents, Washington, D. C. 30 cents. Background of agricultural adjustment discussed, pp. 1–9; activities of Consumers Counsel Division, pp. 61–67; careful index gives other references of interest to consumers.

NUTRITION AND THE PUBLIC HEALTH. Proceedings of a National Conference on the Wider Aspects of Nutrition, London, England, April 27–29, 1939. Pp. 150. Address: British Medical Association, B. M. A. House, Tavistock Square, W. C. 1, London, England. 70¢ post free. This conference, sponsored by the British Medical Association, was attended by 400 delegates representing 7 departments of the British Government, 6 overseas Governments, 80 public and scientific organizations, and 30 industrial and commercial undertakings. Lord Horder, Chairman, stated the conference theme: . . . The problem of malnutrition, of food, and of poverty in the midst of plenty—that surely is not an overstatement—can never be solved compartmentally, but they can be solved if taken together and dealt with by a long-term policy. The conference considered the medical aspects of nutrition, and means of stimulating production and consumption of foods to provide more adequate nutrition on a national scale.

TRADE BARRIERS AMONG THE STATES. Proceedings of the National Conference on Interstate Trade Barriers, April 5–7, 1939, Chicago, Ill. Pp. 127. Address: The Council of State Governments, 1313 East 60th Street, Chicago, Ill. 75 cents. This conference considered studies of trade barrier legislation by governmental agencies, and the reports of conference committees on trade barriers as related to taxation, agriculture, liquor control, and commerce and industry.

PROBLEMS UNDER INFORMATIVE LABELING, by F. S. Blanchard, Pacific Mills; Harold Brightman, L. Bamberger & Company; and Esther Cole Franklin, American Association of University Women. Marketing Series Number 34. 1939, pp. 23. Address: American Management Association, 330 West 42nd Street, New York, N. Y. 50 cents. Reviews the present status and possible future developments in the field of informative labeling. The writers consider the problems in this field from the standpoint of the manufacturer, retailer, and consumer.

GOOD TEETH, by F. C. Cady and John Knutson, U. S. Public Health Service. Supplement No. 149 to the Public Health Reports. 1939, pp. 6. Address: Superintendent of Documents, Washington, D. C. 5 cents. Advises on the development of and methods for proper care of teeth in babies and children.

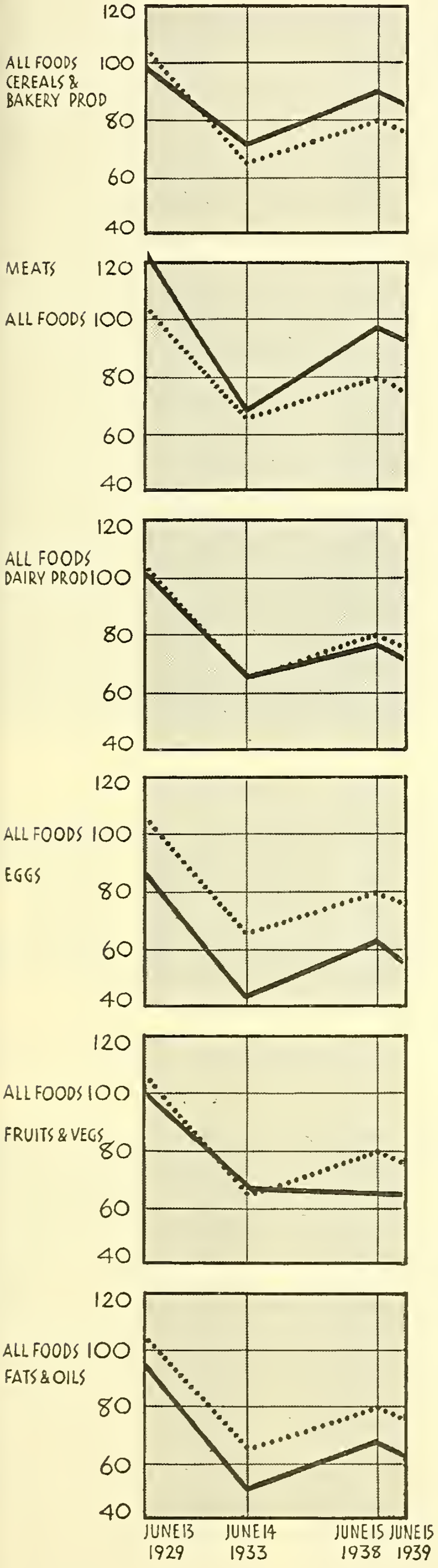
MAKE IT OF LEATHER, by J. G. Schnitzer, U. S. Department of Commerce. Trade Promotion Series No. 190. 1939, pp. 33, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Describes basic equipment and methods for leatherwork, with suggestions and designs for making more than 15 leather articles.

HOUSEFLY CONTROL. U. S. Department of Agriculture Leaflet 182. 1939, pp. 6, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents. Gives life history and habits, methods of controlling the housefly, and prevention of fly breeding.

REPORT OF THE TWENTY-EIGHTH NATIONAL CONFERENCE ON WEIGHTS AND MEASURES, held at the National Bureau of Standards, Washington, D. C., May 31, June 1–3, 1938. U. S. Department of Commerce Miscellaneous Publication M161. 1939, pp. 139, illus. Address: Superintendent of Documents, Washington, D. C. 30 cents. Although much of the material in the proceedings is of a technical nature, some problems of interest to consumers are discussed.

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE



FOOD COSTS. Watchful consumers probably saw their food bills shade off a bit during June. The cost of most foods stayed rather steady from May to June, but some cuts in meat prices, particularly fresh and salt pork, by the latter month helped to ease the strain on pocketbooks.

America's June food basket cost less than in any June since 1934. It was a fraction of a percent under May's, and almost 5 percent less than last June's. Most important drops in food prices from a year ago have been in eggs, dairy products, fats and oils, cereals, and bakery products.

Stacked against 1923–25, food costs were 24 percent lower; compared with 1929, they were 26 percent smaller; compared with June in 1933, they were 18 percent higher.

August generally marks the period when cantaloups, huckleberries, blueberries, nectarines, and green corn move to market in largest volume. During this month more apples, pears, figs, plums, grapes, sweetpotatoes, poultry, lamb, and beef come marketward.

FRUITS. Watch for bigger supplies of fruit this year. Reports are promising. Compared with last year, chances are that more apples, peaches, and plums, but fewer grapes, pears, and summer oranges, will be marketed.

MELONS. Watermelon and cantaloup supplies may be smaller than in August 1938.

MEATS. Supplies during the remainder of 1939 may be larger than a year ago. More pork than in 1938 but about the same amount of lamb are expected. Beef may be less plentiful despite larger supplies of better grade beef.

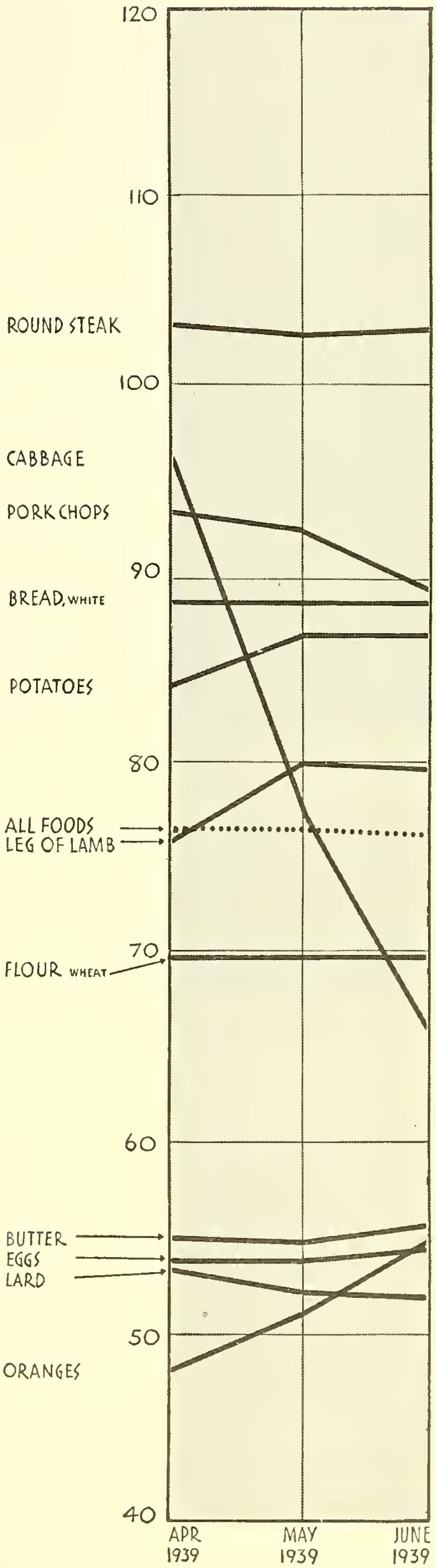
DAIRY PRODUCTS. Butter production in August probably will be relatively large compared with recent years.

POULTRY AND EGGS. Experts expect more chickens and eggs during the remainder of 1939 will be available than in 1938. Turkeys also will probably be more plentiful.

POTATOES. Supplies this summer still are expected to be smaller than in 1938, but in the fall and winter, when the late northern potato crop moves to market, they may be slightly above their 1938 level.

SWEETPOTATOES. Market observers look this year for the third largest supply on record.

A CLOSE-UP



IN THIS ISSUE

JULY 1939 ● VOLUME VI, NUMBER 5

Another Battle Against Waste and Want 3
They Sell Gasoline by Grade . . . 7
New Uses for Old Products 9
Cooperation 12
Consumers' Bookshelf 13
Your Food Supplies and Costs . . . 15

U. S. GOVERNMENT PRINTING OFFICE 16—1836

BETTER DIETS

CONSUMERS' GUIDE

AUGUST 1939

CAN SIZES

MORE NEW USES

COOPERATION

LIMES

CONSUMERS' GUIDE

AUGUST 1939 VOLUME VI, NUMBER 6

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.

MARY TAYLOR, Editor

EARLY this year the Secretary of Agriculture released a study made by the Department of Agriculture and said, "Today we cannot say that we have free trade between the States." In the report, Barriers to Internal Trade in Farm Products (see *Consumers' Guide* for March 13, March 27, and May 1, 1939), scores of instances were cited showing how State laws of one kind or another were limiting distribution and raising costs on practically every food product—milk, butter, eggs, poultry, meats, fruits, and vegetables.

Since that report was issued a trend has turned a corner to come back in the direction of freer trade between States. A recent announcement by the Department of Agriculture revealed that a number of barriers have been taken down by action of State legislatures and only 2 additional restrictive laws were passed this year.

Cooperation between State governors, State Departments of Agriculture, and other State officials, the Department of Agriculture says, offers hope that by 1941 many of the worst trade barriers will have been removed.

No diminution of the number of trade barrier bills introduced into State legislatures was reported, but better informed State legislators refused to enact them.

X OUT June 25, 1939, on your calendar and instead draw a circle around 2 other dates, January 1, 1940, and July 1, 1940.

June 25, 1939, was the day the principal label requirements of the Federal Food, Drug and Cosmetic Act, which became law on June 25, 1938, were supposed to go into effect. But now as the result of an amendment to the Act they do not go into effect until January 1, 1940, and in certain cases, some of the provisions may not go into effect until July 1, 1940.

Since a summary of the provisions which have been postponed may also serve to remind consumers of the benefits which await them under the new law when it finally goes into complete effect, here it is.

So far as foods are concerned, these are provisions that do not go into effect until January 1, 1940:

The provision requiring all coal-tar colors used in foods to be certified by the Food and Drug Administration.

The provision requiring labels to bear the name and address of the manufacturer, packer or distributor.

The provision requiring foods for which a standard of identity has been established to conform to that standard.

The provision requiring labels on foods to state, when this is the case, that the foods fail to conform to established standards of fill or quality.

The provision which requires foods to be called by their common names if they have any, and if they have no common name and are made up of 2 or more ingredients, to show on their labels all ingredients.

The provision which requires foods claiming special dietary virtues to be labeled with as much additional information as the Secretary of Agriculture may think necessary to prevent consumer deception.

The provision that any artificial color, artificial flavor, or chemical preservative be announced on the label.

So far as drugs and devices are concerned the amendment suspends until January 1, 1940, the following provisions:

The provision requiring coal-tar colors used in drugs to be certified by the Food and Drug Administration before use.

The provision that labels bear the name and address of the manufacturer, packer, or distributor, and a statement of the quantity of the contents of the package.

The provision which requires drugs containing habit-forming ingredients to give warning of this fact to consumers.

The provision requiring a drug to bear its common name if it has one, and to list its ingredients on its label if it is made up of 2 or more ingredients.

The provision which requires labels of drugs containing certain ingredients, including alcohol, to state exactly how much of these ingredients they contain.

The provision requiring drug labels to give adequate directions for the use of the drug, and to give warnings against their use under any conditions which might make them dangerous.

The provision which requires official drugs to be packaged and labeled according to the directions contained in the United States Pharmacopoeia, the National Formulary, and the Homeopathic Pharmacopoeia, which are recognized reference works on drugs.

The provision which requires drugs susceptible to deterioration to be labeled with adequate warnings of this fact or to be packed in such a way as to prevent or retard deterioration.

So far as cosmetics are concerned the amendment suspends the provision prohibiting the use in cosmetics of any coal-tar colors not certified to be safe by the Food and Drug Administration. Also suspended is the requirement that labels on cosmetics give the name and address of the manufacturer, packer or distributor of the cosmetic, and its weight, measure, or numerical count.

Delay in putting some of these provisions into effect may extend even beyond January 1, 1940, in certain cases. For example, if the Secretary of Agriculture should find that some manufacturers have labels or packages bearing label statements which were made up before February 1, 1939, he may find that putting the law into effect 11 months later will cause undue hardship. In that case he can delay the effective date of the relevant provisions in the law until July 1, 1940.

Except for delaying the effective date of some of the provisions of the Food, Drug, and Cosmetic Law, the amendment made only one slight change in the law itself.

Under the original law, drugs containing certain narcotic ingredients had to bear labels giving the name, quantity, *and* percentage of these ingredients. This has been changed to require the name, quantity, *or* proportion of these ingredients.

The question might arise, What provisions in the Food, Drug, and Cosmetic Act are actually in effect now?

The answer is, every safeguard against poisonous, unsafe, or unwholesome foods, drugs, and cosmetics in the law except the one requiring the use of certified coal-tar colors.

For example, the provisions permitting the licensing and supervision of food factories during an emergency is in effect. So is the provision which requires new drugs to be submitted to the Department of Agriculture for testing before they may be used.

For a complete discussion of the Federal Food, Drug, and Cosmetic Law consumers are invited to write in for a copy of *Consumers' Guide*, July 1938.

●

OUR THANKS to the Farm Security Administration for the main cover illustration and for the pictures on pages 3, 4, and 5.

The South Looks to the Soil

Not only to produce better incomes, but also to pave the way to healthier diets, the AAA is working with southern farm families to overcome the handicaps of generations

A **FOOD,** like air—though it doesn't come free—is everywhere. Hanging from trees, shooting up from the ground, roaming the ranges, swimming in the seas, darting over railroad tracks, stacked in great warehouses, crowding grocery shelves, cooking on kitchen stoves—there's food. Tons of it, binsful of it, platesful of it. Food to make bones grow strong and straight. Food to build healthy tissues to cover bones. Food to fuel bodies so they can work, and play, and create new life. And food enough for everyone of 130 million people to consume nearly three-quarters of a ton a year.

Yet one-half of America eats a diet that is below the safety line. One-half consumes the kinds and amounts of foods that short-change their bodies. One-half lives on a diet too low in one or more elements essential to vigorous, sturdy life.

If a Nation's greatest wealth is its people, if a Nation's greatest liability is its badly nourished people, America has a job to do.

Scientists may be laggards in helping consumers define the difference between a top and a poor quality machine. But on the foods that humans should have, there they have done their job. They know the difference between safe and unsafe diets. In time, they will go on and improve their present knowledge. The line may move this way or that. But sufficient facts are at hand now on which to measure America's diet shortcomings, and on which to build toward a Nation, not one-half but two halves, well-fed.

Diets are poor, the scientists say, when they fail to be both well-balanced and sufficiently abundant. Every food has in it certain nutrients. These nutrients have different uses and values in the body. Some build

BETTER DIETS

WHEN incomes are low, the chance for healthy living is small. But land can be made to produce for human bodies as well as for pocketbooks. AAA helps southern farm families use their land wisely to do both jobs.

bones; some grow and repair tissues; some give energy. The body needs all these nutrients in the right proportion. Where diets are likely to be most deficient is in Vitamin A, in calcium, in Vitamin C. Foods richest in these nutrients are dairy products, eggs, vegetables, and fruits. Well-balanced diets include a sufficient quantity of these "protective" foods.

DIFFERENCES between diets below and diets above the safety line are clearly drawn. For example, among white farm operators in the South fair or good diets include 34 percent more eggs, 51 percent more butter, 32 percent more milk, 17 percent more leafy, green, and yellow vegetables, 79 percent more tomatoes, than do poor diets.

Now, of all the people who might be expected to have good diets, farm families, it would seem, come first. They live on the soil. They should know how to make the earth work for them. Bureau of Home Economics scientists have applied their yardsticks of good diets to families living in every kind of community and have found it is true that farm families as a whole have better diets than do families living in more populous communities and not directly engaged in extracting their living from the soil. But that degree of superiority is so slight as to be almost unimportant. Four out of every 10 farm families, they find, consume diets that are unsafe. In some areas families rate better than this; some rate worse.

Poorest fed of all farm families, they find, are those who live in the South. Not even well-to-do Southern farm families always get the kind of diet that puts them over the safety line. Four out of 10 Southern white families with incomes of $1,500 to $2,000 consume poor diets. Five out of 10 Negro families at this income level have poor diets.

Step down the income ladder and the proportion of poor diets grows. At the lowest rung, the families with incomes of $500 a year or less (that means net income in cash and in kind) show greatest deficiencies. Almost two-thirds of the Southern white families at this level are eating meals that fail in one way or another properly to nourish them. Fifty-five out of 100 Negro families with this income are short-changed in health.

STATISTICS can be flat and insipid until you realize that behind them are handicapped human beings.

Recently 100 thousand children stood up to be measured. They were children living in different communities over the country. They came from families with different-sized incomes. Bureau of Home Economics scientists, taking their measurements, found that in every important body measurement, the children of poorer families lagged behind those financially better off. They found, too, that in areas where poor diets were most common, the physical development of the children lagged most.

Other scientists, studying sickness and the life span of people, have found that morbidity and mortality rates move—in the large—as the quality of diets changes. Where diets are poor, there sickness and short life is most frequent. Study of a group of 50 Georgia farm families, struggling at the barest subsistence level, *showed* that among 288 individuals, 14 had pellagra, 62 rickets, 70 defective vision, 196 defective teeth. Other scientists, scanning the health records of people throughout the country, see that days of sickness, weeks of inability to work, multiply as poverty and poor diets increase.

Nor are all the handicaps of inadequate food statistically measurable. They show, too, in the easy fatigue that overtakes even gentle exertion. They show in inefficiency at work. They show in discouragement of spirit. Buoyant spirits flourish on healthy bodies. Healthy bodies grow from food well-balanced and adequate.

AIR may come effortlessly, but everyone knows good diets have to be worked for. Between the growing and the consuming of food there must be toil and planning. There must be energy and income. There must be knowledge of the kinds and amounts of foods that make for maximum health and the desire to consume them.

It takes only one grain of horse sense to know that when incomes are low the chance for healthy living is small. Incomes of thousands upon thousands of farm families in the South are tragically low. Almost one-quarter of those not on relief live below the $500 line. In New England only 6 out of 100 farm families have as little as this. In North Central States, there are 8, and in Pacific States 9, out of 100. Only in the Mountain and Plains States is the proportion larger than in the South. There, 27 out of 100 incomes are below $500. While the proportion is larger, there are fewer farmers in Mountain and Plains States.

CONTRASTS become sharper even within the South. Operators of farms stand a better chance of getting larger incomes than do sharecroppers—the men who own no land, and often no capital of any kind. In return for the opportunity to produce a crop, they divide the income it brings with the person who furnishes them land, equipment, and workstock.

Operators in the South do better than croppers. While 17 out of every 100 operators not on relief have incomes below $500, 46 out of every 100 sharecroppers are in this group.

Sharper still are the contrasts between white and Negro families. Among operator farm families, 11 out of 100 white nonrelief families fail to reach the $500 income class; 38 out of 100 Negro families do, too. Among sharecropper families, lucky enough to keep off relief, 30 out of every 100 white families struggle along on less than $500; 57 out of every 100 Negro families do, too.

No account is taken in these figures of people who have been forced to look to their governments for sums to help them struggle along. One-third of all the families receiving relief in the South are farm families. Almost two-thirds of all farm families in the whole country depending on relief live in the South.

Figures like these can get in your hair, if not in your blood, unless you stand back and look at them dispassionately. When all the figuring is done, another fact stands out sharp and clear.

Such a fact is this: The way we run our economics, good living cannot be got without money, but better living can be got when land is worked to produce not only money but food. Families that look to the land for cash income, can also look to the land for the meals they eat.

BUILDING better diets for farm families is more than a matter of dollars and cents in pocketbooks. When the diet graders in the Bureau of Home Economics stacked up Southern farm family diets they found that even with incomes under $500, more than a third of the families succeeded in getting good or fair diets. On the other hand, some poor diets were found among families in the $2,000–$3,000 income group.

Records do not show how much the success of small income families depended on their growing part or all of their food, nor how much the failure of the higher income group could be charged to buying all their food.

Like scissors that have two blades to cut, better use of land welded to better incomes can cut down the number of families whose diets are wretchedly poor.

Too many Southern families are not using their land to nourish their bodies. Of 3½ million farms in Southern States, more than 400,000 have no chickens, more than 900,000 have no milk cows, 800,000 have no gardens, more than 2 million have no plowable pastures for the feeding of livestock. Two million and a half have no orchards. Yet these are the sources of just the kinds of nutrients hundreds of thousands of families lack in their diets.

REASONS galore explain why the land has not been made to work more efficiently for human bodies as well as for pocketbooks.

Overcrowding is one. Today there are almost twice as many farm people in Southern States as there were at the close of the War between the States. A million more people are living on farms that produce cotton than were there 25 years ago.

Crowded lands mean small farms. When farms are small, every inch must be made to pull its weight in the family struggle to survive. Often too much of the land is used in a struggle to produce a cash income—from crops such as cotton and tobacco which humans can't eat—that will not only buy goods the family needs but meet the expenses of production.

Working muscles and land this way has not brought the hoped for rewards. Depression at home and loss of markets abroad have slashed deep into the money these farmers earn. Costs of goods and services they need have too often remained high. The tighter the squeeze between low prices for what they sell and high prices for what they buy, the harder these farmers have worked to increase production of cash crops.

Insecurity of living is another reason behind poor diets. Fifty years ago, 3 out of every 4 farmers owned land. Today only 3 out of 5 own land. In the South, more than half of the tillers of the soil do not own a thimbleful.

Tenants, by whatever name, live in insecurity. With nothing to offer but their labor, sharecroppers live closest to the economic edge of life. Even the slender protection which their cropper contracts provide gives way under pressure of economic necessities and interests of landlords. Once off the land, they must take their chances with hundreds of thousands of other laborers for the chance to earn a day's wage.

Owners of land, too, are often forced on to the highways in search of the chance to work and eat. When land becomes too poor to work, when prices of farm commodities drop too low to fence the farm against its creditors, when families are swelled too large by unemployment in cities, then owners—as well as tenants—must take to the road.

INSECURITY such as this cuts deep. It cuts into the land. There is little time, and

[*Concluded on page 14*]

MILK is nature's most nearly perfect food, but 900,000 farms in the South report no milk cows. AAA helps southern farm families use their land so that producing milk for home consumption is possible.

PATCHES of ground can blossom into vitamins that bodies need, yet 800,000 southern farm families have no gardens. AAA encourages families in the South to raise their own fruits and vegetables.

Calling Cans to Order

A consumer problem takes its place in the headlines as the Temporary National Economic Committee, a Conference of Weights and Measures Officials, and the canning industry look into the confusion in can sizes

SEATED behind microphones at a long table in the expansive caucus room of the white marble Senate Office Building a Congressional Committee has, since last October, been peering into the economic machinery which makes the country go round.

Manufacturers, businessmen, economists, observers of every stripe and breed, have passed along to the Temporary National Economic Committee what they know about the economic machinery which serves the American people well in some years, badly in others.

Reporters at another table jot down notes, and photographers roam about, punctuating the proceedings with sudden flashes of light while they hold their cameras aloft.

Understanding the economic gears of America has become front-page news, front-page pictures.

ONE DAY recently, onto the center of this stage walked a new kind of witness. In the weeks and months of testimony-taking no "ultimate consumer" had ever appeared. Now here were 4 homemakers, asking to be heard. All of them women who manage a household, buy groceries, and see that a family is fed. One of them brought to the witness stand 18 cans and 3 bottles of tomato juice. Photographers, recovering from their surprise, leaped to take pictures. Reporters began writing hurried notes. Committee members leaned forward, pushing microphones aside, the better to hear and see.

Everyday problems of consumers were in the news and on the front pages.

"Gentlemen," said the consumer testifier, "these 18 cans and 3 bottles of tomato juice were all purchased at one time in the same store. If you glance over them you will find they include 11 different brands, and they come in 17 different sizes. When you get a statistical chart and figure out what tomato juice costs per ounce in each of the 21 different containers, you find that tomato juice in this one store sells at 15 different prices.

"Consumers who want to buy the most economical kind of tomato juice simply can't unless they are willing first to do an hour of statistical work," the consumer representative continued. "If they prefer one particular brand but want to find out how much they are paying over the lowest price for their preference, they have some more computations to make.

"It's very hard," the consumer representative apologized, "to talk as confusingly as the picture actually is. But look at this chart."

Then while everyone in the room craned his neck to see the chart, she unrolled a statistical analysis of one consumer's adventures while buying tomato juice.

"Here are the tomato juices," she said, "the sizes of the cans, the fluid volume, the price of each container in ounces, and the price for each 10 ounces of tomato juice."

TOMATO JUICE—SIZES AND PRICES

(In one Washington store on one day in May 1939)

No.	Size*	Fluid volume	Price	Price per 10 oz.
			Cents	*Cents*
1	211x315	10¼ oz.	2 for 0.09	4.4
2	211x411	12 oz.	.07	5.8
3	211x413	12 oz.	.07	5.8
4	211x414	12½ oz.	3 for .25	6.7
5	300x407	14 oz.	.07	5.0
6	300x407	14 oz.	2 for .17	6.1
7	300x408	14 oz.	3 for .19	4.5
8	Bottle	1 pt.	.12	7.5
9	303x509	1 pt. 4 oz.	2 for .17	4.2
10	307x512	1 pt. 8 oz.	.10	4.2
11	307x512	1 pt. 8 oz.	.08	3.3
12	Bottle	1 pt. 10 oz.	.17	6.5
13	Bottle	1 qt.	.21	6.6
14	404x615	1 qt. 14 oz.	.21	4.6
15	404x708	1 qt. 18 oz.	.19	3.8
16	502x505	1 qt. 18 oz.	.25	5.0
17	502x505	1 qt. 18 oz.	.22	4.4
18	502x510	1 qt. 20 oz.	.25	4.8
19	Bottle	2 qt.	.27	4.2
20	603x700	3 qt.	.39	4.1
21	603x700	3 qts. 3 oz.	.39	3.9

* 211x315 means a can $2\frac{11}{16}$ inches in diameter and $3\frac{15}{16}$ inches in height, outside measurements.

With a teacher's wand in her hand the consumer representative conducted a lesson, based on the chart, for the interested committee members, reporters, and photographers.

"Notice," she urged, "that in no two packages do you find the combination of size, net weight, and price, identical.

THIS consumer used 21 containers to open a Congressional Committee's eyes to the canned chaos problem. All 21 containers of tomato juice, bought in one store at one time, included 11 brands, 17 different sizes, and sold at 15 different prices.

"Sizes vary by as little as one-sixteenth of an inch, and net weight varies by as little as one-half an ounce."

Turning to the committee members, the consumer representative put a question to them: "Just what is the difference in cost per ounce of 10½ ounces at 2 for 9 cents, and 12½ ounces at 3 for 25 cents?"

And that, the consumer representative might have said, is a measure of canned confusion in only one of the dozens of different foods housewives buy. When you multiply tomato juice by peanut butter and apple sauce, and baked beans, and coffee, and canned peas, and canned corn, it's plain to see that consumers must either abandon care in buying or go back to school to learn integral and differential calculus.

COMMENTING on this kind of consumer testimony, the Consumers' Counsel of the Department of Agriculture told the committee exactly why it should be looking into can sizes.

". . . In a system of free enterprise," he said, "the choices which consumers make in the spending of their money provide the ultimate test of competitive virtue.

"Unless the consuming public is in a position to make this final judgment of approval or disapproval, there can be no assurance that business enterprise is serving the public interest. Insofar as consumers may not be able to know where their interest lies in the selection of goods and services, they cannot exercise this power to shape the affairs of industry toward maximum satisfaction of their wants."

Can sizes don't include all the confusions consumers must face when they buy goods, nor even all the problems they must face when they buy food, but you clean up a room by beginning in one corner of it and putting it in order.

WHILE CONSUMERS presented their grievances to the TNEC, across the town another group of people gathered to grapple with can-size problems, too. These were local, State, and Federal Weights and Measures officials. Once a year Weights and Measures officials meet in national conference to post each other on the developments in their field. This year can sizes received more attention than any other single question.

Reporting on the container problem, a conference Committee on Standardization of Packaged Goods first considered the problem historically. Container problems are in the public eye today, the Committee explained, because business methods and living conditions have changed radically during recent years. For generations commodities were sold by standard units of weight and measure, but modern merchandising methods have changed the old grocery store from a rendezvous of bins and barrels to a display of packaged goods. The package is the thing today, and scoops, quart measures, bushel measures now find a resting place chiefly in museums.

It isn't that Weights and Measures officials want to bring back the good old days along with the horse and buggy and the hitching post in front of the courthouse. So far as food products are concerned these are good new days. Packaging has enabled manufacturers to give consumers cleaner food and a greater variety of foods. But granting that packers and canners have improved food products since the yesterdays, there are problems today arising out of the present-day use of packaged foods. The can disorder is one of these problems, a problem that confounds not only consumers but also Weights and Measures officials who are charged with seeing that consumers get full measure for their money and that honest business does not have to compete with dishonest or deceptive practitioners.

VARIOUS REASONS lie behind the mumbo-jumbo of cans that decorate grocers' shelves, these officials recounted. First of all, fruits and vegetables themselves don't come in standardized sizes. Corn on the cob has contours unlike a prune's. Asparagus demands a can into which you can't easily slip a sliced pineapple. Can sizes are whimsical in part because nature has whims.

Markets, too, have whims. One year tomatoes or tuna fish may be very cheap, while the next year they may be very expensive. Canners, of course, could go on packing the same amount of foods in cans year after year and simply raise and lower prices per can as the commodities in the cans go up and down in price. But consumers, canners believe, resist price changes. They want a 10-cent can of tomatoes or a 15-cent one of tuna fish. Charge them 8 cents for the can of tomatoes and they don't appreciate the bargain. Charge them 12 cents and they won't buy.

One way we meet this problem, some canners say, is to vary the size of containers with the change in price of its contents. Thus, whims of nature and the whims of the market are two explanations that are given to explain why cans come in so many different sizes. Another reason, the canners offer, is one which stems from the whims of the people who complain about can sizes, consumers.

Restaurants and institutions, the packers explain, like extra large cans of food. Large families want a large can of food but one that is not as large as the institutional sizes. Middle-sized families want middle-sized cans of foods. Small families want a small-sized can of food. And bachelor men and women who live in apartments all by themselves want a can of food which contains one portion for one person.

A fourth reason put forward by canners for can-size confusion has grown out of the history of canning. Many canneries are local industries. There is no packing center for fruits and vegetables, the way Detroit is the automobile center of America. Canners have set up in business in every region of the country. When they first began, each region hit upon its own can sizes and shapes. When they grew up to maturity and began to buy their cans from national can manufacturers they carried on the tradition of their distinctive can shapes and sizes by ordering the sizes and shapes they had always used.

COMPETITION between the sellers of packaged foods is a fifth reason for the canned chaos.

This is the way it works. Two competitors are each in the business of selling tea, say. Each one sells a quarter-pound of tea in a package for 20 cents. Suddenly, to get an advantage over his competitor, Dealer No. 1 puts out a 3-ounce package of tea at 15 cents. The size of the box remains the same; but the contents have been reduced by 25 percent. Of course, this dealer is very careful to put the correct contents of the new package on the label; if he didn't he would be violating the law of most States, and a Federal law if his product enters interstate commerce. The label, therefore, reads where everyone can see if he looks long enough and hard enough, "Net weight 3

ounces." But very few people ever look, and very few ever see, and that, of course, makes them partially responsible for their own confusion. Not entirely, however, because sometimes they ask for a 4-ounce package of tea from their grocer and are given, all wrapped up, a 3-ounce package. Occasionally, this is done deliberately, more often it is done because not even the grocer can find his way around in the confusion of container sizes.

Consumers, however, accustomed to paying 20 cents, seeing a package of tea for 15 cents, say to themselves, "Oho, a bargain," and they stop buying the quarter-pound package of tea for 20 cents to buy the 3-ounce package of tea for 15 cents.

Competitor No. 2 is in a spot; he can continue to pack his 4-ounce package of tea and lose business to his competitor or he can put out a 3-ounce package that looks like 4 ounces.

"DEALERS," the report of the Weights and Measures Conference Committee says, ". . . are forced in order to meet competition to follow the lead of their competitors and adopt practices which they know to be irregular and which in many cases lead to conditions which are not to the best interests of the majority of the producers themselves."

Talking about foods that line the pantry shelf of every consumer, the Committee cited 7-ounce cans of coffee instead of the 8-ounce cans consumers are accustomed to buying, and 13-, 14-, and 15-ounce cans of coffee instead of the familiar 16-ounce cans.

One distributor put up 13 ounces and 16 ounces of barley in identical packages and 14 and 16 ounces of pea beans in identical containers.

Since the paper container for milk has appeared one container manufacturer was approached and asked to make a 6-ounce, instead of the standard 8-ounce "pint" container. To his credit, he refused.

Beer comes in 6½-ounce, 7-ounce, 10-ounce, 11½-ounce, 12-ounce, 26-ounce, 29-ounce, 30-ounce, and 32-ounce containers.

There are 15 different-sized cans containing between 7 ounces and 31 ounces of tomato juice.

Matzoth, an unleavened bread which is used in the religious observance of Easter by Jews, comes honestly in 5-pound packages. Yet during Easter a year ago New York City inspectors discovered 1,100 storekeepers who handed customers 4 pounds and 9 ounces of matzoth when they were asked for a 5-pound package.

That's why cans and packages are confusing. "But," said the Committee on Standardization of Packaged Goods of the National Conference on Weights and Measures, "these reasons do not constitute a justification for perpetuating the confusion."

In a report that was accepted by the Conference as a whole, this Committee said:

"There is absolute necessity for the standardization of the quantities of all commodities now sold in packages, whether of food or otherwise. Present practice leads to fraud, deception, and unfair competition." And, the Committee continued, "Due to the interstate nature of this problem it must be remedied by Federal law."

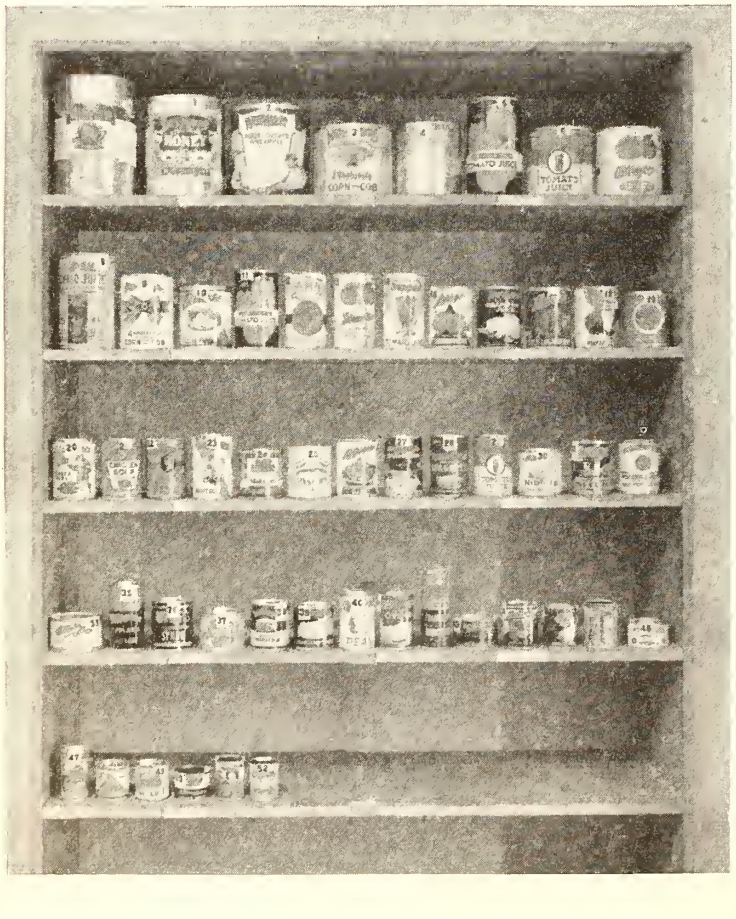
That is their solution.

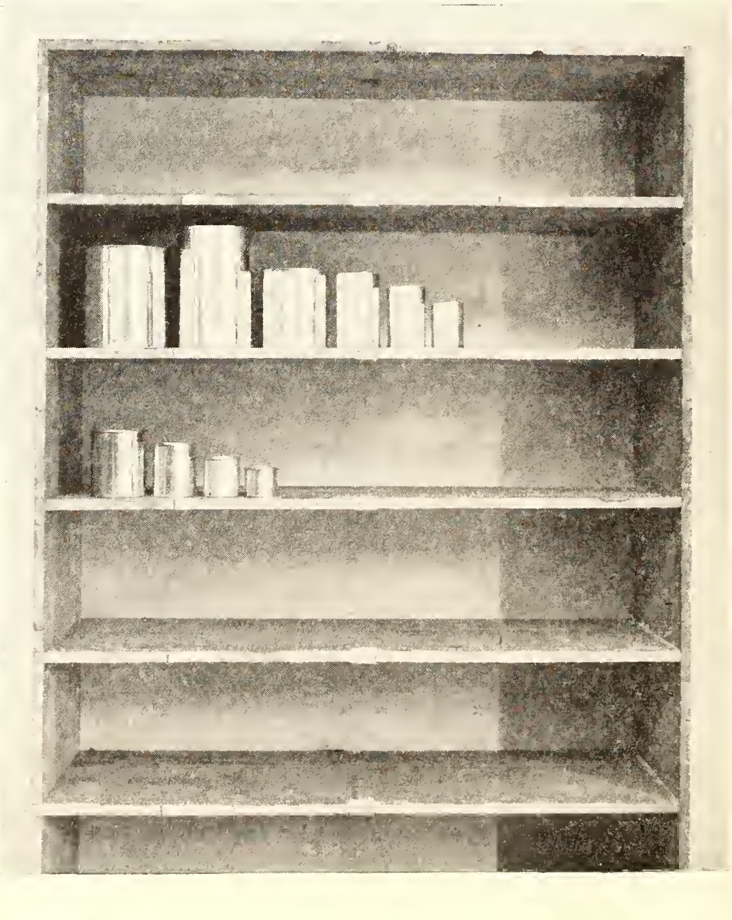
NOW COME THE CANNERS with their formula for calling up order out of the canned chaos, and—to mix a metaphoric salad—for getting the sand out of the economic spinach.

Despite all the valid reasons for eccentric cans, the canners say, we do not object to simplifying can sizes. What we do object to is any attempt to force canners, by wielding a law, to do what they will do and want to do voluntarily.

Pointing to the history of their own

THERE are 52 different can sizes on the shelves to the left, but on the shelves of all the stores where consumers buy there are said to be at least 155 can sizes. On the shelves to the right are 10 cans in easily distinguishable sizes. A State Weights and Measures Official offers these as an example of what a vigorous effort to simplify can sizes might do to simplify buying problems.





efforts, they remind the people who want a law that canners have already developed simplified can practice recommendations through the Division of Simplified Practices of the National Bureau of Standards.

This Division, which was created in 1922, has as its job the function of cooperating with America's industries for the purpose of eliminating the superfluous sizes and shapes of manufactured products.

The Division confers with manufacturers, distributors, and consumers in an attempt to work out methods for the elimination of useless and confusing variations in sizes and shapes. Beginning with the sizes and shapes that manufacturers actually use, the Division and industry together go through them and decide which ones can be done away with. When a set of suitable practices is finally ready for recommendation, it is submitted to the manufacturers, distributors, and consumers of the products concerned. If approved by manufacturers producing 80 percent of the commodity in question, and if there is no substantial disapproval by others, the recommendations are promulgated by the Department of Commerce.

FIRST STEP toward simplified practices applying to cans was taken in 1928. At that time the canning industry got together through the offices of the Division of Simplified Practices to work out a set of can recommendations reducing the number of can sizes to 27. These recommendations, which were finally promulgated officially in 1934, proposed that canners voluntarily cut can sizes to 27.

Three years later the canners tried to get the wrinkles out of their schedule of recommended can sizes by amending it to reduce the number of can sizes to 21. That was in 1937, but a Division survey of the 1937 pack showed that cans still come in more than 155 different sizes. Now that legislation has been proposed by Weights and Measures officials, the canners are working with the can-size problem with renewed energy, this time through another revision of the original schedule.

The trouble with the first two attempts, the backers of the new can-size code say, is that the starts toward a solution of the problem were made from the wrong direction. In the first two attempts, the recommendations sought to standardize the size of cans without paying any attention to what went in the cans. This time the canners are going at the problem differently. They are sizing up the cans by looking at the commodities that go into the cans first.

TAKING into account both the need for a reform of can sizes and the cost that any changeover would place upon canners, the canners, with the help of the Division of Simplified Practices, tackled the problem with two principles to guide them.

First, it was decided, "the sizes selected for each product must be such as prevent consumer deception; that is, there must be sufficient differences in appearance and in the contents of the can to prevent confusion in buying.

"Second, the sizes selected should be from those now in use by the industry so as to reduce to a minimum the expense incurred in adopting the recommended list."

On this basis the Committee on Simplification of Containers suggested for the consideration of canners a tentative list of 33 can sizes. Additional sizes were suggested by individual canners and under the new plan put out for approval.

Under the new plan 44 can sizes have been recommended. Of these 44 can sizes, one can size has been recommended for use with 56 products, 21 can sizes are recommended for use for more than one product, and 23 can sizes are recommended to be used for one product each.

Tomato juice, when these recommendations are finally adopted (which should be in time for the 1940 pack), will come in 10 can sizes instead of the 44 can sizes in use as reported to the Division of Simplified Practices, or the 18 can sizes which the consumer witness reported to the Temporary National Economic Committee she had found in a single store. (Bottles are not affected by the can recommendations.) This is the largest number of sizes allotted to any one product. Most commodities under the recommendation will come in 4 or 5 sizes.

RIGHT NOW the new voluntary rules for can conduct are being circulated among canners, distributors and consumers for approval. When they are approved by what the National Bureau of Standards calls adequate representation of these groups, they will be promulgated.

Promulgation of the new recommendations means that canners and packers have a set of standards to use if they wish to. They will be under no compulsion; they will be violating no law if they don't choose to simplify.

AND THERE the issue rests. Consumers don't have to be told how much wear and tear on their arithmetic standardization might save. Nor do advocates from industry need to have pointed out to them gains that might come from standardized can sizes. They point to the economies which simplifiation would bring by reducing the number of dies and machines necessary in making cans; to the simplified inventories it would make possible; to economies in labeling, packing, and shipping.

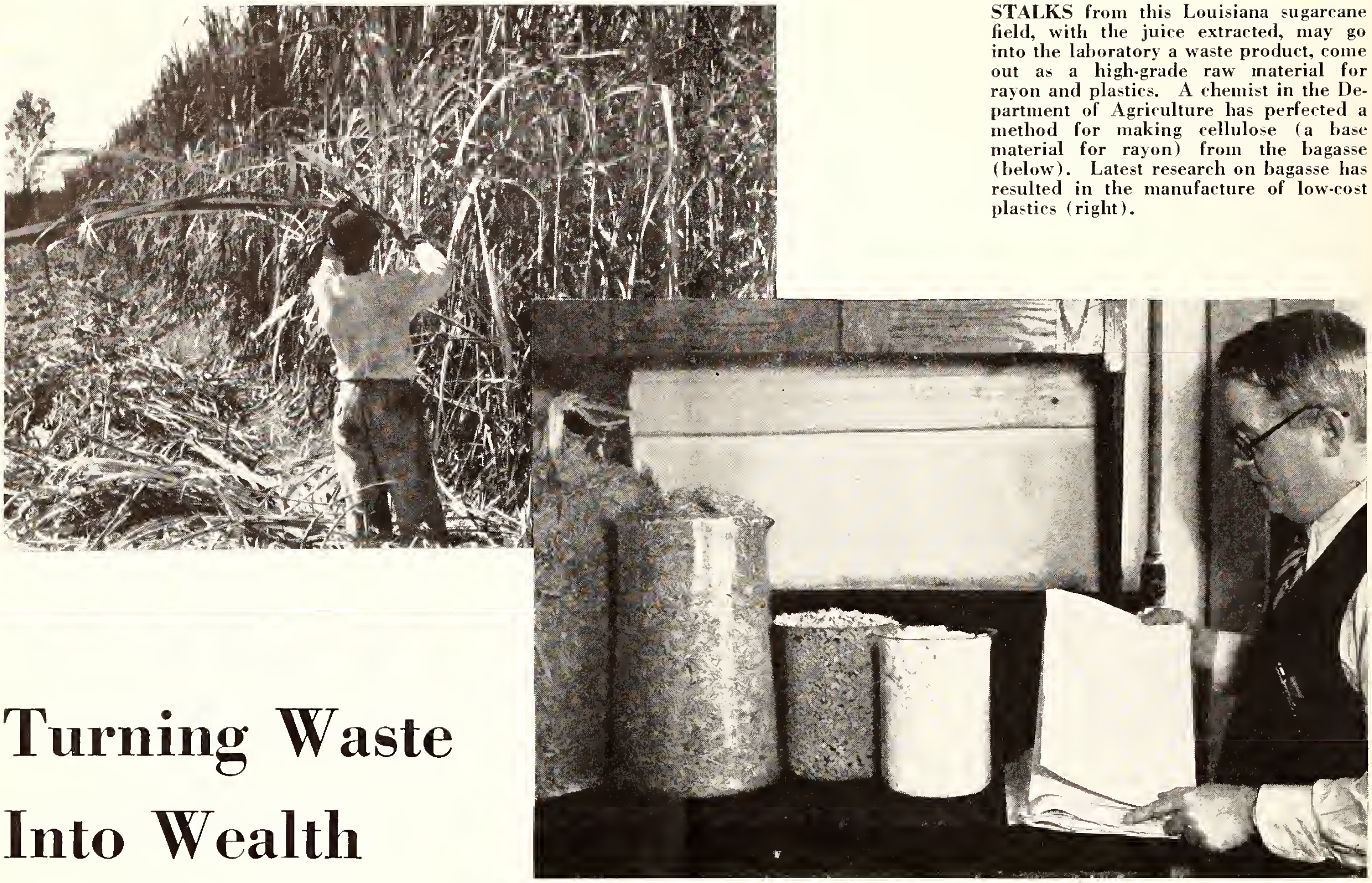
THE ISSUE, drawn clearer now, is whether these changes shall come about through laws or through voluntary trade action. The city and State Weights and Measures officials at the Conference urged the former. The industry urges its voluntary plan. Consumers, so far as we know, have not yet had the alternatives placed before them for their choice between the two.

Anyone may obtain, without cost, a copy of the Report of the National Conference of Weights and Measures Committee on Standardization of Packaged Goods from the Division of Weights and Measures, National Bureau of Standards. Copies of the proposed Simplified Practice Recommendations for Sizes of Cans for Fruits and Vegetables (SP—2763) can also be obtained free from the Division of Simplified Practice, National Bureau of Standards, Washington, D. C.

ALCHEMISTS and philosophers spent the better part of the Middle Ages looking for a Universal Remedy, but today most people have given up their search for philosophers' stones, except perhaps the toothpaste company which recently drew a Cease and Desist Order from the Federal Trade Commission.

This credulous company advertised, to what it hoped would be equally credulous consumers, that its toothpaste was a competent, efficient, germicidal or antiseptic agent; that it removed stains from the teeth, kept the mouth thoroughly clean and healthy, assured consumers of sound teeth, and restored brightness to dull teeth. It was, the company said, concentrated to the point that it was more economical to use than other toothpastes, and it would do things beyond the capacity of other toothpastes.

Wonderful, all of it, if it were true, but the FTC turned the toothpaste and the claims over to a modern scientist, and all the pretensions evaporated in a test tube. About all this toothpaste could do was what other toothpastes will do, that is, remove surface stains if the people who use it brush their teeth thoroughly. The toothpaste company was ordered to discontinue its misleading representations.



STALKS from this Louisiana sugarcane field, with the juice extracted, may go into the laboratory a waste product, come out as a high-grade raw material for rayon and plastics. A chemist in the Department of Agriculture has perfected a method for making cellulose (a base material for rayon) from the bagasse (below). Latest research on bagasse has resulted in the manufacture of low-cost plastics (right).

Turning Waste Into Wealth

More new uses for farm products and waste products, discovered each year, show how science is making agriculture important in industry as well as in food and feed production*

CORN comes out of the fields headed for human and animal larders. En route somebody pulls a switch and the corn is shuttled onto a branch line, then into a laboratory test tube.

Simple as it looks on the cob, corn becomes a complex subject for the chemist. As a result of his work, from corn today are made 15 separate manufactured products. Those products go into everything from explosives to paper, from perfumes to corncob pipes, from wallboard to alcohol. Science is doing its share toward finding many uses for corn besides food for humans and animals.

And science is doing its share, too, for the farmer who is looking for new fields to conquer, fields not of the store counter and kitchen, but fields of industry.

No infant upstart in the laboratory is this science of merging industry with agriculture. While the past few years have seen a renewed interest by industry and private laboratories in the science, workers in the Department of Agriculture, and in other Government and endowed institutions have for years been attempting to solve the dual problem of farm wastes and surpluses and inadequate farm income. One recent study shows that today from 86 agricultural products come 133 different raw materials that are used by industry. These raw materials make 240 different manufactured products, which in turn have 400 different uses.

From the beginning scientists peered into the mysteries of corn. America produces 2½ billion to 3 billion bushels of corn annually—about 60 percent of the world's crop. Nine-tenths of that crop is used for animal feed. But market outlets for feed have been closing up since the war years.

For a long time industry has used corn for the starch in the corn kernel.

The starch products of corn go into foods, puddings, ice cream, jellies, jams. Big consumers of the starch also are laundries, paper and textile manufacturers, and makers of explosives, adhesives, and dyes. Each bushel of corn yields 30 pounds of starch.

STARCH is not the only product of corn that is starred in industrial laboratories. That artificial snow you see in movies may come from corn. Cold-water paints sometimes have their origins in the chemical mysteries of corn, as do pastes, fillers, and sizing products.

Much has been written and much has been prophesied for the future of corn as a base for fuel. Fuel alcohol that depends partly on corn for its manufacture, used as a 10 percent blend with gasoline, can furnish power for automobiles or gasoline-type engines. A plant in Kansas has made such fuel with some success. But chemists shy away from predictions. Most of them agree that so long as our petroleum reserves hold up, fuel alcohol will play a secondary role in the filling station.

Chalk up to the credit of corn also its use in plastics, in the manufacture of leather and rayon, in the manufacture of backs of carpets, and in the manufacture of various chemicals. From the corncobs come absorbents, materials for packing and polishing,

---

* *Second of two articles on new uses for old products. The first appeared in the July 1939 issue.*

while from the stalks are made insulating materials and wallboard.

Third-ranking among the cereal crops of the country in total tonnage are oats. Topped only by corn and wheat, this food used for animals and in cereals has an annual harvest of around 18,000,000 tons a year. The industrial hope for oats lies in the straw and the hulls. From these have been made fuel oil and gas, cellulose, building board for construction work, insulation and absorbent materials. drugs, paints, varnishes, and a host of related products.

High up on the chemist's research list are agricultural products that never find their way to the markets. These are the agricultural wastes.

AGRICULTURAL WASTES include such products as straw, stalks, stems, hulls, cobs, shells, pods, bagasse, and so on. Most often they are back-tracked to the farm to be used for fuel, litter, animal feed, and other farm purposes. A large part of the wastes is burned or left to rot. Some 200 million tons of these agricultural byproducts annually must be disposed of by the farmer. In themselves, their dollar value is practically nil. But science sees in them a treasure whose price tag might be several hundred million dollars if it were possible to redirect them into industrial channels.

A beginning has already been made on converting these farm wastes into useful products. The strawboard industry makes use of straws, stalks, and stems. Insulation for homes and buildings comes from bagasse, cornstalks, and straw.

Furfural, whose source is oat hulls, is used for production of synthetic resins, purification of natural wood resins, in the refining of lubricating oils, and as a paint remover, solvent, and preservative. Furfural is also being explored as a source for alcohol, as a wetting agent, and as an ingredient for low-cost road building. Its possibilities in the paint industry and for manufacture of insecticides are being investigated, while some chemists foresee the day when this farm waste shall be routed to refineries to be converted into fuel for Diesel engines.

From practically all farm wastes comes lignin. Forty-five million tons of it a year are estimated to be destroyed or wasted. The laboratory has mapped the way for lignin to be used as a major natural source for perfumes, aromatic products, and flavorings. Many chemical industries plan to use it in plastics and for structural purposes. Also from lignin come basic ingredients of tanning agents, core binders, road binders, dust settlers, adhesives, dye · diluents, preservatives, and fertilizers. Chemists foresee the day when this valuable farm waste will play a major part in the textile industry as sizing and filler.

"Hemicelluloses" to the layman is a word that is part of the mysterious vocabulary of the scientist. Some agricultural wastes—oat and rice hulls, cottonseed hulls, cereal straws, corncobs—are 20 to 35 percent hemicellulose, the chemist will tell you. He has checked up the family tree of hemicellulose and now is back at the laboratory peering further into its mysteries. Some day, it is predicted, agricultural wastes containing this chemical will be side-tracked to paper-making plants, there to become a plentiful and cheap raw material for use in the manufacture of paper.

Headline news on the chemical front only a few weeks ago was the report on sugarcane bagasse made by chemists of the Department of Agriculture working at the Agricultural By-Products Laboratory at Ames, Iowa.

SUGARCANE BAGASSE (the stalks remaining after the juice has been extracted) once was rated as a nuisance by the sugarcane grower. Then it found a place in the manufacture of wallboard and now this waste is hailed as a new source for making low-cost synthetic plastics.

Three different methods have been developed for the manufacture of plastics from bagasse. Two of them yield products that do not shatter easily and in fact will not break when struck hard enough with a hammer to cause a dent. With this new cheap source for one of the major ingredients of plastics, scientists predict that the plastics industry may be able to branch out into the manufacture of furniture, binding materials, and automobile parts on a large scale.

From plastics made by the first and cheapest method chemists predict will come bathroom tile suitable both for floors and walls. The plastic is waterproof, and in addition to having the wearing quality of wood, can be sanded and repolished.

Second method of making the plastics from sugarcane bagasse—slightly more expensive—yields products of high bending strength. These do not warp, and may be sawed, drilled, and even nailed. Consumers of a year or a decade hence may be using card-table tops, desk tops, and building panels made from these plastics.

Last method developed makes a plastic which in quality is half way between those made by the 2 other processes. This plastic also makes good table tops, desk tops, and similar products.

How long it will be before some enterprising manufacturers go into large-scale production of plastic products made from sugarcane bagasse remains to be seen. There is still much to be done in the way of research and in solving production cost problems, but the chemist can point to an accomplishment that may some day mean a new source of income for the grower of sugarcane.

CHEMISTS also are using sugarcane to make industrial alcohol, wallboard, insulation, acoustic material, and see in it a possible source for paint and varnish fillers.

Forest products have always been used in industry, and make everything from beams to toothpicks, telephone poles to rayon, fence posts and railroad ties to furniture and newsprint paper. But in the last 30 years industries founded on ceramics, concrete, metals, and plastics have grown up to challenge the mastery of the forest.

But people depend on forests, too, for their living, and science is exploring new uses for forest products which will make for better income for the 6,000,000 people who are dependent on them.

THE TALL and slender southern pine is now food for the roaring newspaper press. One plant has been built and others are in the blueprint stage for the manufacture of a domestic supply of newsprint from the pine forests of the South. Rayon also may come from such pulpwood (above) as is piled up beside this factory.

One of the more promising of the new outlets for forest products is the paper industry. We still import 5 to 6 million tons of paper and wood pulp annually. Newsprint paper is a large proportion of this, but a native source for this newsprint could cut the cost measurably.

THE SOUTHERN PINE is the new hope for newsprint. One plant is already in operation in the South manufacturing newsprint from Southern pine, and plans are being drafted for additional plants.

From the Southern pine, too, may come cellulose for the rayon industry, which when developed may give Southern farmers a new source of income.

The list of products made from wood is almost endless. Today, the range is varied enough to include plastics, sugars, and alcohol, pulp, vanillin, tanning agents, road binders, cement setting agents, and perfume bases. Wood resin is used in the manufacture of disinfectants, and, equally as well, in the making of tires and batteries for your automobile.

Like the soybean, tung nuts came to these shores, a stranger from the Orient, and remained to be adopted when it was found they thrive on certain parts of the American soil. 1923 is the year tung nuts went into commercial production in this country. In 1938 we grew 20 million pounds of nuts which made 4 million pounds of oil, but we still import 175,000,000 pounds a year—mostly from China.

Not as versatile as the soybean, tung nuts nevertheless have found themselves being used in an ever-widening industrial field. Varnishes and enamels have first claim on them. Tung oil is water-resisting, making it ideal for dried varnish and enamel films. The beautifully carved Buddha idols and Chinese boats and bridges have been known to exist for centuries because of the protective covering of tung oil. Today, American industry is learning how to use that same tung oil for the same purposes, and at the same time is developing a new crop for the farmer. Tung oil is also used to dress leather, and to varnish furniture and floors. The Chinese make India ink from it and combine it with other substances to calk their junks. The waterproofing properties of tung oil make it valuable for coating paper and other materials, and in construction work, while it is also used in the manufacture of linoleum and printing inks.

Production of citrus fruits has been reaching record highs in the past few years. Economists behind the scenes, foreseeing serious surplus problems in the near future, have taken their dilemma to research chemists. Already chemists see the possibility of using oils found in lemons and oranges as ingredients for perfumes and flavorings. Some of the constituents of the fruits are thought to have use in the manufacture of cosmetics, while one of the problems of the research man is to separate the valuable vitamin C in citrus fruits so that it can be given in concentrated form to those individuals whose doctors tell them they need it.

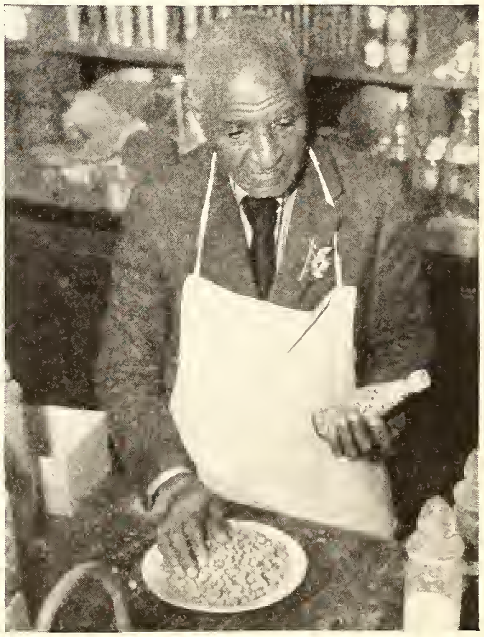
The processing wastes of fruits—cores, peelings, seeds—have yielded substances used in the manufacture of stencil sheets, waterproof coatings, edible oils, soaps, paints, varnishes, plastics, floorings, fillers, insecticides, and so on down the list.

PEANUTS have always been a favorite of those given to Jules Verne predictions on the industrial future of the products of agriculture. Oil has been the peanut's password to the industrial laboratory up to now. Ninety percent of all peanut oil produced in the country today goes for shortening, oleomargarine, and other edible products. Now scientists see in the peanut a new source of plastics. The peanut hulls may be used as mild abrasives for burnishing steel and tin plate. Other products from the peanut include breakfast foods, high-protein flour, ice cream powders, dyes, inks, cosmetics, and medical products.

Last, but far from least on the farmer's list of products that may be used in the industrial plant of tomorrow, is linseed flax. From the oil of the seed, paints and varnishes are made. Linoleum and printing ink also list linseed oil among their constituents. From the straw of the seed are made upholstering material, floor covering, insulating boards, while from the stems come thread and twine.

Brightest star on the linseed horizon is the discovery that it makes a fiber that is excellent for cigarette paper. Our annual bill for cigarette paper, now imported, runs between 5 and 6 million dollars. Contrariwise, fiber from linseed flax is now destroyed or wasted. For growers of this now wasted fiber an industrial use may boost income.

FOR HALF a century a trail-blazer in industrial research on farm products, Dr. George Washington Carver, of Tuskegee Institute, Ala., has discovered more than 285 possible commercial uses for the lowly peanut.



COOPERATION

A "HANDBOOK of Cooperative Health Associations" is one recent publication of the Public Affairs and Workers' Education Division of the Utah Works Progress Administration. Other mimeographed publications of this Division have included manuals on consumers' cooperatives, producers' cooperatives, cooperative accounting, and cooperative education; and a general "Manual on Consumer Problems" (see "Utah Consumers Work Together," in the *Guide* for November 7, 1938).

The "Handbook of Cooperative Health Associations" attempts to give a picture of health conditions in the United States and in Utah. It describes, on the basis of statistical studies, some unmet health needs. It stresses the importance of preventive medicine.

Cooperative principles are discussed in general, and in their relation to medical care. Finally, the booklet gives pointers on cooperative organization of consumers to meet their needs for medical care, dental treatment, and hospitalization. It does not advance the cooperative method as a panacea. But for those who are studying cooperative organization for health, practical problems are discussed, such as the scale of fees, allocation of dues, "membership abuse," and transportation of doctor. Accounting suggestions are offered, and several sets of bylaws, and agreements between health associations and doctors and hospitals, are reproduced.

A very limited supply of these handbooks is available from the Utah WPA.

THE STORY of farmers' cooperatives is being written up, State by State, by experts in the Farm Credit Administration. Pamphlets have already appeared covering the cooperatives in Virginia, Nebraska, Kansas, Ohio, and Colorado.

A number of other stories are now in press, though there will, of course, be no attempt to cover every State. Copies of those State studies which have been printed may be obtained free of charge from the Farm Credit Administration, Washington, D. C.

"YOU AND YOUR CO-OP" is the title of another series which is now being put out by the Farm Credit Administration for farmers' discussion groups and vocational education classes in agriculture.

Eleven of the booklets take up the problems of farmers' co-ops in the marketing of a number of farm commodities, and in cooperative purchasing, insuring, financing. A few of the titles are "Using Your Co-op Creamery," "Using Your Co-op Gin," "Using Your Purchasing Association." Wool co-ops, livestock co-ops, poultry and egg associations, fruit and vegetable co-ops, fluid milk co-ops, cooperative elevators, will also be taken up. Generally these bulletins will follow an outline of this sort:

"Becoming a member of the cooperative.
"Helping to finance the cooperative.
"Helping to run the cooperative.
"Extending the services of the cooperative.
"Helping to adapt the cooperative to changing conditions."

Seven other bulletins tackle special problems of farmers' cooperatives. The titles are self-explanatory:

"Sizing Up Your Cooperative."
"Forming Farmers' Cooperatives."
"Financing Farmers' Cooperatives."
"Managing Farmers' Cooperatives."
"Merchandising by Farmers' Cooperatives."
"The Story of Farmers' Cooperatives."
"The Government's Policy Toward Farmers' Cooperatives."

"The Story of Farmers' Cooperatives," already out, briefly traces a hundred years of American rural cooperation in 20 pages. Other bulletins in the series get from 12 to 32 pages.

Finally, for the use chiefly of teachers, there is a pamphlet called "Using a Local Cooperative as Source Material for Teaching."

Copies of these bulletins may be had without charge, as they are issued, by writing the Farm Credit Administration in Washington.

MUSIC lovers are the latest group to use the cooperative method to get what they want. Under the auspices of a cooperative book club, organized on a national basis with headquarters in New York City, a group of phonograph record enthusiasts have made arrangements for a Nation-wide mail order cooperative service.

The plan is to supply records on order. Individuals will buy on a retail basis; cooperative societies, libraries, and schools on a wholesale basis. Rochdale principles will govern the organization of the new co-op, and the distribution of its net gains, if any. Each month the publication of the co-op book club will carry news of the phonograph record world.

IMPROVEMENT and standardization of accounting practices occupied the attention of cooperators at the recent meeting in Milltown, Wis., of the National Society of Cooperative Accountants. Some of the technical problems discussed were: The scope of a cooperative audit, income tax problems of cooperatives, forms for simplified balance sheets, auditing cooperative wholesales, making financial statements clearer to members.

The society was formed in 1936. It now includes half a hundred members from 16 States and 15 different cooperative auditing services or auditing departments of cooperative associations.

THE WORLD'S FAIR has been used by New York cooperatives as an occasion to show interested out-of-towners what cooperatives are trying to do in the world's largest city. A "Cooperative Center" in the central part of the city has been set up by local groups and several cooperative wholesales.

Visitors are invited to inspect a cooperative apartment community, a national mail order co-op headquarters and salesroom, a cooperative mail order book club, the Bureau of Cooperative Medicine, the original office of the Cooperative League, a chain of 8 cooperative restaurants, said to be the only co-op restaurant chain in the world, a regional cooperative wholesale specializing in groceries, and its testing kitchen. Movies are exhibited of cooperatives in action in Nova Scotia, France, and the United States.

UPPER BRACKETS of Government grade label specifications only will be used in specifications for foods packaged under their own cooperative label, buyers for 5 cooperative wholesale associations recently voted. The uniform labels are being used, by the buying federation of these 5 wholesales, for the 500-odd co-op groceries they serve in 25 States.

MUCH TALKED of these days are plans for better coordination of cooperative activities within the cities where co-ops have more or less commenced to take hold. From Philadelphia, the Eastern Cooperative League reports that meetings are being held to discuss the pros and cons of a loosely-knit federation for the co-ops in that city's metropolitan area.

In New York, a committee has completed a year's study of the possibility of federating the city's 58 consumer societies.

A meeting of the delegates from New York City societies in June made three main recommendations with regard to the proposed Metropolitan Cooperative Federation:

"First, that the function of the federation be purely advisory and not punitive; second, that membership include study clubs; and third, that the functions of the federation should be complementary to the activities of the Eastern Cooperative League and in no way conflict with its program."

In October delegates will gather again for action on the redrafted proposals, which are now before the city's cooperatives.

RECENTLY much talk has been heard of the advantages to consumer cooperatives in having their own banking and financial structure. Farmers have for some time been accustomed to special banks for cooperative credit for production, processing, and marketing activities.

A controlling interest in a State bank at Beech Grove, Ind., has just been purchased by several Indiana cooperative associations, credit unions, and other nonprofit groups. The credit unions and cooperatives have already seated a majority of the bank's board of directors.

Explaining the move, the manager of the Indiana Farm Bureau Cooperative Association states: "This move has been sponsored particularly by the Indiana Farm Bureau Cooperative Association in order to put a definite plan and system behind its own financing operations and services. Under the plan anticipated, ultimately all the stock in the corporation except directors' shares will be held by wholesale cooperative associations, retail cooperatives, credit unions, and other nonprofit corporations."

The South Looks to the Soil

[*Concluded from page 5*]

less encouragement, to rebuild the soil, to plant soil-building crops, to pursue long-time fertilizing practices, to contour plant, to terrace, to plant trees, to build dams, to fill gullies. In their pressure for cash, insecure farmers deplete their soil capital, and thereby deplete their future earning power. In almost every Southern State, half of the tenants stay 1 year or less on the same farm.

Insecurity cuts into human beings. It makes for undernourished people. Undernourishment tears down the defenses against pellagra, malaria, hookworm. Weakened and unsheltered bodies make poor workers, listless citizens, hopeless fighters in the war against want.

These are the conditions—many of them true of other farm families—which have brought into being a half-dozen programs to help agriculture. The Nation, through its Congress, has said it is time to call a halt on the insecurity that grows out of uncertain, fluctuating, and inadequate markets. It is time to call a halt on pressures that force farmers to mine their soil. It is time to call a halt on diets that fail to build bodies and spirits that are sturdy and joyous. Not only the people who live on farms, but the whole Nation, has an investment in the welfare of farm people. The whole Nation is trying to make good that investment.

SPEARHEAD of this attack on underprivilege is the AAA Farm Program. It aims at big goals; steadier and better income from major crops; conservation of soil from which future income can be drawn; steadier production of foods and fibers for all consumers at prices fair to farmers and consumers; healthier people living on the land.

AAA provides farmers with the recommendations for adjusting the number of acres they will plant to cash crops, so that the yields from those acres will not overtax the markets where cotton can be sold. If this fails to do the job, it provides farmers with loans to hold back from the market too abundant crops. It provides money for making "parity price payments" when prices for crops fail to come anywhere near pre-war purchasing power.

Tying in with AAA efforts to get bigger incomes are the programs of the Farm Credit Administration, which lends money to farmers to tide them over from planting to harvest; the reciprocal trade agreement program of the State Department which tries to build bigger markets abroad; and Agricultural Marketing Service, which undertakes diversion and export programs for increasing sales abroad.

Such programs lend direct help to farmers' incomes. Others help indirectly, but as importantly. Money spent to put purchasing power in the hands of the unemployed moves back into farmers' hands when these people go to shop for the products that farmers grow. Laws that help low income workers get better wages push upwards, too, on farmers' markets.

The AAA Farm Program links arms with other agencies in aiding farm families to conserve soil. Payments for soil conservation go to farmers who plant grasses and legumes; who terrace their land; who plant trees, fill gullies. All this ties in with the work of the Soil Conservation Service and the Experiment Stations in studying how farmers can best hold the topsoil from which crops must grow, and in giving them practical demonstration of good techniques.

Finally, the AAA joins with the Farm Security Administration, the Extension Service, and many teachers and schools to point the way to better diets. Wise soil building and conserving practices can do more than hold and build the land. They can lay the foundations for the kind of farming that makes possible raising for home use milk cows, chickens, and other livestock. They can make possible the production of vegetables, the development of orchards. AAA payments act like a leverage, prying open the opportunity to better food for the family. Farm Security reaches still lower to give a hand to families on the bottom income level, lending the money and counseling with them on farm and home plans that will reestablish their lives on a sound economic basis.

ALREADY thousands of Southern farm families are linked in this great effort toward better farming. This year from two-thirds to nine-tenths of the farmers in Southern States are participating in the AAA program; 6 out of every 10 farmers in Florida; 7 out of every 10 in Oklahoma; 8 out of 10 in Texas, Louisiana, and Georgia; 9 out of 10 in South Carolina, Alabama, Mississippi, and Arkansas.

Dollars added to pocketbooks and dollars invested in better farming practices, can only pave the way to sturdy, healthy people. At the end of that road there must be, too, the knowledge of what makes a good diet, and the desire to consume those foods. Slowly this understanding and this desire grow. As they grow, the prospects for a healthier Nation increase. In the growing process, AAA plays its important part.

Summertime Is Lime Time

Vitamins as well as refreshing flavor come in this colorful fruit, most abundant in summer months, but found on consumer markets the year round

LIMES

"LIMES," a Southern gentleman might have said a few decades ago, "are something the North knows nuthin' about."

And right he might have been, unless the Northerner had been lucky enough to have traveled to the South, the West Indies, the Philippines, or some other subtropical land. Until a few years ago limes rarely put in an appearance in the North. The business of packing and shipping this tender fruit was often a risky one. They were for the luxury market, but rarely for the drug store counter.

A turn-about has happened in the past few years. Lime production in Florida—practically the only State where they are grown on a commercial scale—increased over 6 times in the last 5 years. In 1934–35 farmers sold only 15,000 boxes. In the current year, the Bureau of Agricultural Economics estimates 95,000 boxes will go to market. That's small stuff when compared with the 8 or 9 million boxes of lemons that will come out of the California groves, but, regardless, limes have found their place in the sun—or better, on consumer market lists.

THAT ITS NEW PLACE is a pretty secure one is evidenced by the fact that the Bureau of Agricultural Economics has recently promulgated its first standards for Persian limes, the more common variety. Sales are important enough for growers and dealers to see the value in having definite quality standards to use in their buying and selling operations. Grades will be stamped on containers, so unless consumers buy directly from the large containers they won't see the grade mark.

Reason for the rapid increase in home produced limes has to do with hurricanes in the West Indies as well as with consumer appetites. Ten years ago, Dominica, in the British West Indies, shipped almost 39,000 boxes of the fruit to America's shores annually. Today the average annual shipment is about 7,000 boxes—all because tropical hurricanes and storms have practically ruined the Dominica lime groves. But this country still imports well over 150,000 boxes of limes annually, and the figure is going up. Most of our imported limes come from Mexico, with the balance leaving ports in the British West Indies, Cuba, St. Lucia, and Central American countries.

Prohibition did much to knock the bottom out of the market in limes; repeal had the opposite effect. Increased production in "dry" ginger ales has boosted the demand for lime juice, an essential ingredient of the drink.

The series of Florida hurricanes from 1926 to 1929 caused particular damage to the Key lime groves, and it was several years before the increasing demand for the fruit resulted in a rehabilitation of the industry.

CONSUMERS have their choice of the Persian lime (also known as Tahiti lime) or of the Key lime (also known as the Mexican lime).

The Persian lime is larger and contains more juice than the Key lime. Most of the Persian limes are seedless. Acid content of the juice is usually about 5 or 6 percent. They have a wide lead over the Key lime in consumer markets, and are grown domestically almost exclusively in Florida, whose climate is best suited for the tropical tree.

Persian limes are picked green for shipment. Tradesmen in the market prefer to receive them when green; they last longer on fruit stands. Often the limes turn from green to a light yellow by the time they reach consumer fruit bins. There is very little difference in the juice content of a fully developed green or yellow Persian lime.

Persian limes are favored by growers because they are hardy and immune to many of the citrus fruit diseases. Compared with lemons, they have poor shipping and keeping qualities. They average about the same size as lemons. Look for those with smooth and glossy rind, thin skins, and a fine grained and very juicy pulp. In this condition they have flavor and juiciness.

THE KEY LIME—so-called because it is grown almost solely on the Florida Keys—has a more distinctive flavor than either the lemon or other limes. It is much smaller than the Persian lime, about 1½ inches in diameter, and is almost restricted in use to the making of ades and similar drinks. It outranks other citrus fruits in acid content and is used by manufacturers of citrate of lime and similar products.

Key limes are usually taken from the tree in a light-green condition or when they begin to turn yellow. They turn yellow in shipment or storage, though their juice content is usually fully developed when picked.

Like the rest of the citrus family, limes are triple-starred for vitamin C (Ascorbic acid). Compared measure for measure, limes are about equal to other citrus fruits as good year-round bulwarks against scurvy attacks.

Consumers can be sure of a good buy if they follow these hints: Limes should be firm, not soft or "mushy." Texture should be smooth, although signs of discoloration might pull prices down without affecting quality. Decay, bad color on the inside, broken skins, bad bruises, or skins that have turned hard and dry should be avoided. Color of the Persian lime, preferably, should be green, although limes that have just begun to turn yellow can also be of top quality if they are firm.

IN THIS ISSUE

AUGUST 1939 ● VOLUME VI, NUMBER 6

The South Looks to the Soil 3
Calling Cans to Order 6
Turning Waste Into Wealth 10
Cooperation 13
Summertime Is Lime Time 15

U. S. GOVERNMENT PRINTING OFFICE 166395

F. S. RECEIVED
LIBRARY
OCT

PLANNING

1.14
AD422

CONSUMERS' GUIDE

SEPTEMBER 1939

RUGS

EHFA

CHECK WEIGHING

FOOD BILL

CONSUMERS' GUIDE

SEPT. 1939 VOLUME VI, NUMBER 7

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.

MARY TAYLOR, Editor

AN ENTOMOLOGIST who is also "bugs" on consumer problems reports this. The little black fly, Hilara, ingratiates himself with his mate by presenting her with a parcel of food neatly wrapped up in a cocoon of threads, just as if it were a box of Christmas candy. Deceitful Hilaras, however, are known to present parcels, wrapped neatly in the cocoon of threads which are all wrapping, or mostly wrapping, with little or no food.

Could it be, the consumer entomologist asked, that someone has been studying the Hilara, and doing likewise?

The female of the Hilara species has no Food and Drug Administration to protect her from this masculine chicanery, and because she can't read, she is utterly defenseless. But consumers do get protection from deceptive containers from the Food and Drug Administration and from State agencies. This plus their ability to read should make them practically impregnable if they only exercise their right to read labels.

JOKING ABOUT A SERIOUS PROBLEM, A FEDeral Judge in Detroit recently said that consumers have a right to reasonable care and sanitary precautions in the manufacture and marketing of foods, otherwise, he said, consumers "would have to provide themselves with microscopes or magnifying glasses. In fact, in the future, restaurants might advertise with 'Music and magnifying glasses.'"

Limburger cheese was the subject up for discussion, 2,000 pounds of it, which had been picked up by the Food and Drug Administration because it was contaminated with fly legs and other insect material.

Government experts testified that most of the contamination was found on the rind of the cheese. Seeing a strategic opening, the defendant, the owner of the cheese, hastily countered the government's case by saying, Okay, the rind was contaminated, but consumers don't eat the rind, and that means that no food is involved in the case, and that means there is no violation of the Food and Drug Law.

The government parried this by calling dealers in limburger cheese to the stand to testify that the rind of cheese is eaten, but the Judge, in effect waived all this aside.

Whether consumers eat the rind or not, the Judge said, "Whether such cheese would be injurious to health or not is not of moment, or the court doesn't know, but at least the ultimate consumer in the homes and in the hotels and restaurants has a right to assume that the product he eats or orders is free from such conditions." The cheese was ordered destroyed.

FIVE BILLION DOLLARS FOR YOUR OLD RADIO! Not five billion dollars in cash, but five billion dollars' allowance on one of our new five billion and seventy-five dollar radios!

Absurd? Of course it is, but no more absurd than sales offers of, say, $10 for your old radio, no matter what shape it's in, or $25 for your old radio, or washing machine, or electric fingernail biter. That is not to say, however, that all trade-in allowances are phoney.

People who put on their hats and rush down town to take advantage of bargains like these sometimes actually get nothing for their old gadgets. What they may get is nothing more than a fictitious credit on a fictitious price. The price of whatever it is they buy may simply have been advanced to make up for the alleged allowance.

Putting a pin in these inflated offers, the Federal Trade Commission has recently promulgated a set of Trade Practice Rules for the Radio Receiving Set Manufacturing Industry which forbids these astounding, fictitious offers. Dealers making such offers in the future lay themselves open to Federal Trade Commission action.

The new rules begin with a blanket injunction against the use of any misleading representation in the marketing or sale of radios, radio parts, or radio accessories.

Specifically the rules define terms like "All Wave," "World Wave," and "World Wide Wave" so that they will mean what they say when used to describe instruments.

Radios which are claimed to give distant reception or foreign reception as easily as they give local reception must actually live up to the representation.

If a radio advertisement says a set will bring in Europe as easily as your local station then in the future this must be true.

Noise-free radios must actually be noise-free.

When a certain number of tubes are claimed for a radio, advertisers must not count dummy tubes, or tubes which don't perform the accepted function of radio tubes, that is to detect and amplify radio signals.

False claims for the gadgets that come with radios are barred.

Fictitious prices, fictitious trade-in allowances, all price manipulations tending to deceive consumers are prohibited.

Any attempt to mislead consumers into believing that they are buying one brand of radio set when they are actually buying another brand is forbidden.

Finally "spiffs," a venerable trade custom, go out the window in the new rules. "Spiffs" are sums paid to salespeople in retail stores by manufacturers to push their product. Back of this rule against such a practice is the reasoning that a sales person has the confidence, more or less, of the consumer. But if he is in the pay of a particular manufacturer he can't be expected to be completely objective about the merits of different brands he is charged with selling. Manufacturers object to "spiffs" too, because their use adds to the cost of pushing the sales of their products. In the end, of course, consumers pay these extra costs.

There are so many distributors of radios in the country, and the FTC is so small in comparison with its job, that the rules will work out only if the radio industry itself honestly attempts to abide by them.

All the rules in the Fair Trade Practice code for the Radio Receiving Set Manufacturing Industry are what the FTC calls "Group 1" rules. Violations of these rules, according to the FTC, are violations of the law and will result in FTC action.

The FTC sometimes issues other rules, called "Group 2" rules, whose violation is not considered an unfair trade practice, but whose observance the FTC urges upon industries in the interest of fair play to competitors and consumers.

Copies of the trade practice rules for the Radio Receiving Set Manufacturing Industry may be obtained free of charge directly from the Federal Trade Commission, Washington, D. C.

●

OUR THANKS go to the Soil Conservation Service for the main cover picture and for the illustrations on pages 4 and 5.

Making Plans Grow Like Plants

Land-use planning finds new roots in farmer-expert-administrator committees organizing in counties and States

IT'S A TOUGH FACT, but true, that you can't "discover" the good life, as a prospector "discovers" gold. No shaft shot into the earth, no patient panning of the sands in a river, can bring forth the perfect pattern for living.

What each of us wants, what all of us want, changes in substance and shape and place and time. How we get it must necessarily evolve, too.

But people in democratic countries hold stubbornly to one faith: That the chance for everyone to get a better living increases as people pull together.

That's why county land-use planning committees are forming hither and yon over the country. That's why 38 States already have agreed to create State land-use planning committees. That's why a special office of government has been created in the Department of Agriculture to serve as connecting link in the planning done by counties and States to the East and North, to the West and South.

County and State land-use planning committees are workshops in which farmers, technical experts, and administrators of farm programs pool their wisdom and experience; work out detailed analyses of the land resources and needs of their own communities; scrutinize plans for aid in their communities; and adjust programs to the necessities of their own people.

They are a brand new venture in citizen collaboration. Each collaborator has his own contribution to make to better land use. Each has something to learn from the other. Together, their talents are multiplied and their forces generate new energy for the building of a sounder, healthier agriculture.

There was a time when people operated on the theory that education alone would achieve for farmers the good life. Those who were not smart enough to learn good

WATER, moving uncontrolled over land, gnaws at the soil, and when it is done it leaves behind fields ruined for agriculture. Coping with problems as big as this is impossible when each farmer works separately.

COUNTY land-use planning committees help farmers to pool their wisdom and energies with experts and administrators of farm programs in working out plans for conserving soil against the devastations that uncontrolled waters wreak on the land.

farming, those who were not diligent enough to practice it, could be left by the wayside. Education was the cure-all of farm problems.

That was before the Great War, when farmers' problems centered largely on how to get more and more and more farm produce. There were markets at home, and markets abroad. Vast, unsaturated markets. Growing markets. Markets to be had by the farmer who was smart enough to plant the right products, produce the right quality, market with efficiency.

Times changed with the Great War. One by one, countries abroad turned their backs on American farm products. One by one, they raised high tariffs, laid heavy embargoes, imposed taxes on imports of farm products. After the great flush of glory in the 20's, even American markets for farm products collapsed. Depression swept the land. Millions of workers were laid off. Wages swooped down to subsistence levels and below. Prices shrank. Unemployed sons and daughters moved back to the land. Stagnation spread.

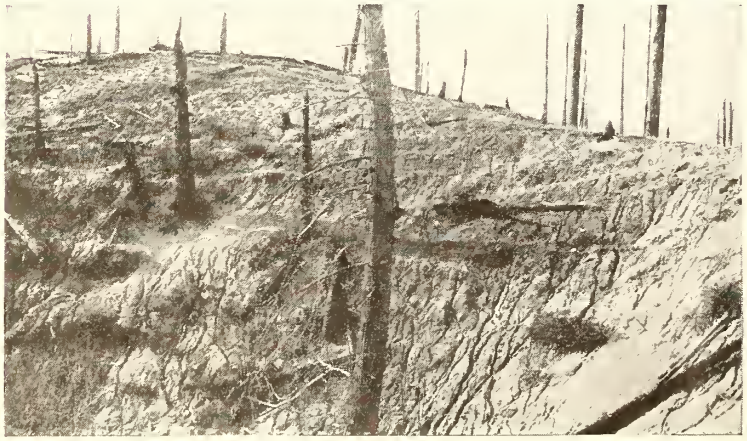
BEING ONE DEGREE SMARTER THAN THE next man doesn't help much when an earthquake bursts through the crust of things as they are. Earthquakes are no respecters of persons. Nor are depressions. Their bricks and stones fall on the wise and the stupid. As individuals both are helpless. Together they must pull each other out of the debris.

Farmers learned that in 1933. They learned it again in 1934 and in 1936 when drought and dust storms laid dead hands on the land. Out of this knowledge grew farm demand for help from the cities, dependent on farms for food, as farmers are dependent on cities for income.

And the cities and the farms pulled together. Out of a national Congress came programs of relief . . . An Agricultural Adjustment program, later followed by an Agricultural Conservation program, to help farmers adjust production to market needs, to support prices of basic farm crops, to help farmers husband their soil, to help farmers produce more of their own food supplies . . . A Soil Conservation program to show farmers how to stop wastage of land . . . A Farm Security program to help to their feet farmers on uneconomic farm land and farmers with no capital . . . A surplus removal program, to prevent unmarketable supplies of farm produce from pressing too heavily on farm prices, and to ease these supplies into the market baskets of people with no money to buy . . . A crop insurance program . . . Loans on farm products.

These are action programs, programs that require farmers to take thought of their neighbors' problems as well as their own, programs that need constant adjustment to fit the individual needs of people on land.

ROOTS of trees meshing together catch and hold the topsoil on slopes of hills. But when hillsides are denuded of trees by fire or disease or overcutting, rains are free to complete the wastage by washing away the soil.



LEARNING from experts how to plant trees, rebuild woodlands, protect forests, and being helped by farm programs to put this knowledge into practice, farmers are building a more secure agriculture. County committees serve to integrate this knowledge and practice.

SOIL becomes weary, as do humans, from overwork and undernourishment, and when it is weary it produces poor crops. To rebuild its strength, the ground must sometimes be limed and fertilized. Different soils require different kinds of treatment.

THESE two pictures, to the left and right above, show the same field. Red clover is growing in the foreground. But in the field to the left the soil had not been limed; to the right it had been. County committees study these practices.

Emergencies do not allow sufficient time to develop tailor-made plans, but as emergency conditions settle into long-time problems time must be taken to work out plans that will give the greatest number of people affected a part in making the decisions conditioning their lives.

Inevitably, in their terms, some of the details of one program, when put into practice, have been found impractical or in conflict with the details of other programs. Dovetailing one program with another so as to get a logical and workable whole is a job that can be done only when farmers join with experts and administrators to do it.

THAT'S WHAT THEY ARE DOING TODAY. With experts and administrative officers of the AAA, the Soil Conservation Service, the Farm Security Administration, the Forest Service, and the Extension Service as counsellors, farmers are deciding how land shall be used and how programs shall be fitted to the needs of farm families.

Goal of the county land-use planning program is the development of active farm committees in every agricultural county in the United States. Because conditions affecting agriculture don't stop at county lines, planning must be done, too, by States; so State land-use planning committees are forming. State committees have the job not only of stimulating the work of county committees but also of advising on its direction and coordination. Just as weather and water and markets and prices flow over county lines, so they move over State lines. To be sound, State land plans need to be related to each other and to Federal programs. Central clearing house for this is the newly reorganized Bureau of Agricultural Economics. It is through this Bureau that the U. S. Department of Agriculture cooperates with the State Agricultural Colleges, and with State and county governments in the planning job.

Each county committee consists of at least 10 farm people — men, and sometimes women. In addition, representatives of each State and Federal agency in the county which has responsibility for the administration of agricultural land-use programs sit on these committees. Farmer membership, however, constitutes a substantial majority.

AS A STARTER, FARMER MEMBERSHIP ON most committees is by selection of the County Agent—an expert in agriculture, hired by the county and paid from local, State, and Federal funds. A few committees are composed of farmer members popularly elected. In time, more committees will be so chosen. Meantime, to get work begun, most committeemen have been asked to serve. No farmer is paid for this service.

No form of "busy work" is this new program of farmer-expert-administrator col-

OVERGRAZED land means underfed cattle and high costs for farmers. When there is no community planning and no farm program, many farmers mine their soil in order to get a bare subsistence. Exhausted soil is a cost to the Nation as well as to the farmer.

COUNTY committees scrutinize both lands that have been overgrazed and plans for restoring grass to misused lands. As the grass grows and lands are returned to permanent pasture, the Nation's meat supplies are insured against sudden shortages.

laboration. It costs everyone time and toil.

Planning develops through 3 main stages. Beginning stage is organization. Before county committees are actually formed, there is a job to do in just getting acquainted. County Agents and administrators of Federal action programs meet with farmers. The talk ranges over many things: Troubles farmers are now meeting in their production and marketing of products; kinds of information experts have which can be put to use by farmers; details of farm programs as drawn up by Congress and administered by Federal agencies. Farmers who can see beyond their own fences learn, through such talk, to think in terms of group interests. Out of conversation grows the desire to work together in solving their problems. Out of this desire emerges a county land-use planning committee. This is the preparatory stage.

FROM ORGANIZATION, COMMITTEES MOVE into the second stage when intensive planning is undertaken. Intensive planning centers around the development of as complete a picture as possible of existing resources in the county. Facts are gathered about climate, temperature, topography, irrigation, vegetation, population, crops, livestock, the number and sizes of farms, labor needs—anything and everything that has a bearing on the natural and human materials available for producing a living for people living on the land.

Farmer committees make county maps. These maps show land not now in cultivation which the committee considers should never be in cultivation; lands now in cultivation which should be definitely and permanently retired from use; lands that should be used for this or that type of commercial crop; lands that are threatened with erosion and should be repaired; lands that should be used for the production of foods to be consumed at home.

Accompanying the maps are reports giving more facts and figures; analyzing the needs of the different areas shown on maps; pointing up the adjustments that are needed in each area to bring about better land use.

To this process, farmers contribute their invaluable practical knowledge of the land, their first-hand acquaintance with the people who have tried to make a living from it. Experts contribute their technical knowledge from soil and erosion surveys, farm and population data, farm management and marketing studies—whatever has a bearing on the economic use of a particular county. Administrators contribute their knowledge of the powers and provisions of the various national farm programs.

Graduating to the third state of planning, county committees now scrutinize existing action programs, passed by Congress and administered by Federal agencies. Balancing these programs against the needs of the county, the committees discuss program inconsistencies, maladjustments, inadequacies. Out of discussion emerges agreement on what changes are needed in the direction and operation of action programs if they are to succeed in their objectives in a particular county.

Preparatory planning has been started already in 830 counties. Intensive planning is under way in some 450 counties and will be started in about as many more in the next year. Unified programs, arrived at after third-stage planning is complete, will be placed in operation in at least one county in each State.

Reports of committees at the second and third stages of land-use planning go first to State Land-Use Planning Committees. There they are discussed, criticized, integrated, and finally approved for transmission to the Division of State and Local Planning, an office in the Bureau of Agricultural Economics in Washington. This Division, in turn, transmits these plans, with its recommendations, to the Agricultural Program Board of the Department of Agriculture. It is then up to this Board to make what modifications or adjustments are needed in the details of farm programs, always working within the limits of the laws creating these programs.

ALREADY RESULTS OF THIS INTEGRATED effort of local, State, and Federal people are beginning to show. In Childress County, Texas, the local committee suggested that forestry planting areas should be located on land where wind erosion is most serious. This is being done. In Beaver County, Oklahoma, the committee is working with the Farm Security Administration to discourage farming on poor land, and in developing individual farm-management plans as a basis for rehabilitation loans. On the recommendation of the County Land-Use Planning Committee, Young County, Texas, has purchased terracing equipment for use on farm land. Worcester and Wicomico Counties, Maryland, have each agreed to appropriate $10,000 for farm drainage work along the Pocomoke River watershed, as a result of a study of local drainage needs made by the planning committees. Minnesota has just passed a rural zoning law, after 2 northern county committees had joined forces with the experts who had been recommending this legislation.

As time goes on, the problems which county planning committees take up will expand. Some of them are already probing into the use of land in relation to the diets farm families get. They are finding that not all farm families get a healthy, safe diet; that more food for home use could be produced at home; that families can be encouraged to shift land into use for such production; that such shifts sometimes present knotty problems to be worked out between landlords and tenants.

In the South, for instance, the experts figure major changes in land use would be needed if all farm families were to grow the foods which good diets require and which could be grown at home. For the farm families in 8 southern States to get the quantities of milk and beef they need would mean increases in acreage of 57 percent in grains, 41 percent in roughage crops, 50 percent in pasture over and above the acreage used for these purposes in 1937.

Southern county land-use planning committees, searching for ways to make live-at-home programs work more effectively in their localities, take such data from experts and weave them into local plans. Through the fabric of all plans run the warps and wefts of knowledge and experience gathered from citizen, expert, and administrator.

FARMERS ARE SHOWING THAT THEY LIKE this kind of planning. A farmer member of a planning committee in Connecticut says, "Agricultural planning is so important that we should continue it if we wish to continue in farming." From a Colorado farmer comes the assurance that "developing a program from the bottom up rather than the top down is sound." From another: "We can't do all the things we want to do in a year or 5 years, but I do believe we are starting some place."

State and local officials bring their support. At a meeting of the State Land-Use Planning Committee held in Alabama a few months ago, the Governor of the State said: "It (land-use planning) has added tremendous value, tangible and intangible, to our picture, and it is an enrichment of our society which we, with our own unaided strength, couldn't bring about at all."

Disasters can strike swiftly, distress can sweep far, misery can spread rapidly. Rebuilding the wastes and devastations of misused land, of economic depressions, takes time. Land-use planning that grows out of the thought and work of farmers everywhere is not going to accomplish miracles for agriculture overnight. But if it grows democratically, it will build on sound and permanent foundations.

FROM wool, cotton, and jute comes a rug. Intricate and ingenious machines weave these fibers into the luxurious product that consumers see on salesroom floors. Just as important for practical-minded consumers as the style of a rug is knowing its wearability. Remember that "broadloom" on a rug label means nothing so far as the quality of the rug is concerned.

Tips For Rug Buyers

Knowing weave, construction, amount, and kind of wool are first steps toward getting your money's worth when you buy pile rugs

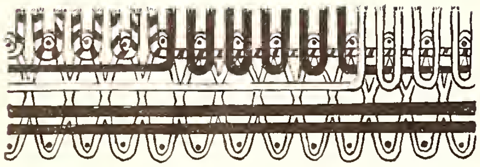
FROM THE PLATEAUS of Tibet to the hills of Scotland, from the mountains of India to the crags of Iceland, shepherds follow their flocks of sheep year in and year out. As they have done for centuries, once a year or once every 6 or 8 months they collect their wool harvest and sell it to traders. Then it is shipped to the ports and markets of the world.

Sheep that scramble nimbly up a precipice have a vested interest in the parlor scenes of Indianapolis, London, and Shanghai. Without sheep there would be no wool for the great Jacquard looms, the Axminsters and the velvets, or the deft fingers of the Oriental weaver. The homes of the world would not have carpets and rugs as we know them today. Any story of carpets and rugs begins with the shepherd and his flock.

Wool—for rug purposes—must come off the backs and flanks of sheep raised in more rugged climates than our own. Rug wool must be tough, with lots of spring and firmness to it, not soft and fluffy. Because American sheep don't have the wool coats necessary for rug manufacture, the wool must come from foreign sources.

BUT THE COTTON BOLL FROM AMERICA'S South also has a star rôle in the making of a rug. The American farmer sells some 20,000,000 pounds of cotton a year to the Nation's rug makers. Strong and sturdy, cotton yarns go not to the surface of the rug, but are buried underneath in the highly important job of binding the rug yarns together, giving the rug firmness and durability. They form the foundation network of the rug, allowing the more expensive wool fiber to appear almost wholly on the rug surface. Jute—and sometimes linen—also spread their tentacles beneath the surface of the rug to give it "body."

Wiltons and Axminsters trace their name origins back to the end of the 17th century when Louis XIV drove the Huguenots out of France. Some of these 17th century refugees fled to the towns of Axminster and Wilton, in England, which even today have great industries devoted to the manufacture of rugs. Unfortunately for Louis, he lost many of his master rug weavers and a flourishing rug industry. France made it up a century later by giving to the world Joseph Marie Jacquard, who invented the modern mechanical loom that revolutionized the carpet industry.



WILTONS are usually figured rugs, and good ones are priced in the higher brackets. Notice, in the cross section, how the pile yarns (those on top) are woven into the base of the rug. These give the Wilton sturdiness, but just as good durability can be had in the other weaves. The type of weave is no indication of quality.

At the end of this historical journey is a consumer—somebody with a pocketbook but possessed, probably, of as much knowledge of the quality of rugs as of sheep raising in the Himalayas.

CONSUMERS ENTER THE PICTURE WHEN THE rug—the product of weaving together wool, cotton, jute, and other yarns—is laid before them along with a lecture on style, beauty, and perhaps a word on durability. Selection of color and design are important if rugs are to serve their aesthetic, as well as practical, purposes. But rug labels and rug ads that tell everything about style and nothing about quality may lull consumers into thinking that rug quality is something that you take for granted. Top question on the lists of most consumers who must make every dollar serve practical purposes first, is this one: "How will the rug wear?"

Rug wear has almost as much to do with its care as it does with the structure of the rug itself. On page 10 we digest the more important rules that should be followed by consumers anxious to get the most out of their rug. To these might be added another tip.

Laying a rug on the floor and leaving it in the same position forever after may soon give you a rug that is as good as new in some spots and worn to the floor in others. This is because the amount of "traffic" on the rug is heavy at entrances, or near a dining table, or around a chair that is the family favorite. Soon, in these places, the pile begins to crush or streak, and it isn't very long before wear begins to show. To avoid this, "balance" the wear on the rug by shifting it around every 6 months so that all sections of the rug have a turn at the more traveled parts of the room. In this way you may get many more years of wear out of the rug.

Do not be worried by "fluffing" of a new rug or "shooting" of an individual strand of yarn. "Fluffing"—in which the carpet sheds a large amount of wool "fluff"—may cause you to fear your rug is slowly disappearing up your vacuum cleaner or carpet sweeper. It is a baseless fear. Though the "fluffing" may continue for several months, the amount of wool lost never amounts to more than a hundredth of 1 percent of all the wool in the carpet, according to one expert.

"Shooting" of a fiber—where a few loose ends appear on the rug surface—is also a minor problem unless the condition becomes general, in which case you have a just cause for complaint. Simply clip the protruding yarn so that it is level with the rest of the rug surface.

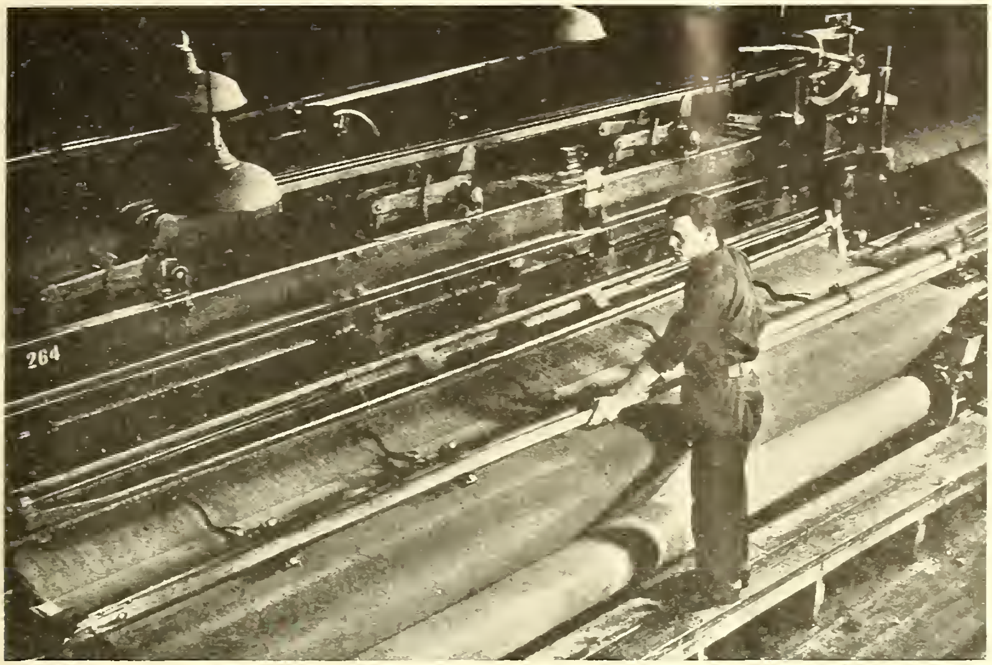
ONE OTHER TIP FOR RUG CARE HAS TO DO with the matter of a mat. "Should I spend the few extra dollars and get an underlay for my rug?" you ask yourself. The answer is, decidedly yes, if you want to get the most wear out of it.

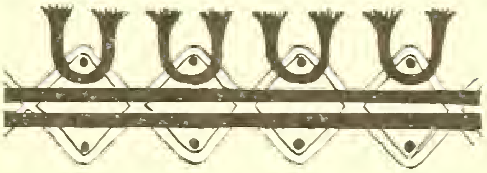
Experts at the National Bureau of Standards found that by placing a mat under a rug, the wear may be increased anywhere from 73 percent to 146 percent. Though every type of rug showed better durability, those with a short pile had the greatest percentage of increased wear because of the underlay. Thick resilient pads are better than the thinner kinds, the researchers found.

But as conscientious as you may be about the care of your rug, it can be all in vain unless you know what a good quality rug looks like in the first place.

CONSUMERS CAN'T BE WALKING ENCYCLOpedias of technical information when they go to buy a rug. That is what they would have to be if they expected to identify quality in a rug for themselves. First they would have to know the weave of the rug, then the type and quantity of materials in it, then the firmness of its weave, and a dozen other facts like these.

In the absence of such information, the only protection the consumer has today against defects in rug quality is to buy from reliable manufacturers who "stand back" of their products. Specific guarantees against the rug's wearing out within a minimum number of years come only in higher-priced rugs beyond the reach of most consumer incomes. Informative and easy-to-understand rug labels are a consumer frontier not yet reached. Blame this not so much on consumers who may have been lax in asking for proper labels, as on the fact that research in rug laboratories has not yet reached the point where tested standards for rug quality can be set up. Scientists in public and private laboratories are working toward the day when reliable and tested quality information will be available to consumers on rug labels. Such information may take the form of grades or it may be in the form of specific facts about the rug structure. But it will recognize that rugs—like most consumer products—have a range of quality that makes them good, bad, or mediocre, and consumers will be able to





HERE is the making of a velvet rug that is to be known as a "broadloom" because it is being woven on a loom 18 feet wide. Velvets are usually solid-colored rugs. A solid-color velvet will wear better than a figured Axminster of the same price. The cross-section shows how the wool pile of a velvet is almost wholly on the surface, as contrasted to the Wilton.

use this information in deciding what quality rug they want, just as today they can buy meats and eggs and other products on the basis of grades. Today rug labels with quality grades are still part of the unmapped consumer no-man's land.

A RUG TRADE ASSOCIATION HAS DONE SOME trail-blazing of its own in setting up label standards for telling the consumer the wool content of the pile (or surface) of a rug, the size of the rug, and best methods for care and cleaning. Aimed principally at misrepresentations that might amount to frisking the rug buyer's purse, the label provisions enable the consumer to know when he is getting a 100 percent wool pile in the rug he purchases. This does not mean the label must tell the amount or quality of wool in the pile. What it does mean is that rug makers who have nothing to hide, who don't mix in other fibers with wool in the weaving of the rug surface, and who don't want to pass off a cotton pile rug as wool, can put on their labels "100 percent wool pile." So far, wool stands alone as the most durable of rug piles. Other fibers—cotton or rayon—while they may look attractive, soon mat down and soil much more easily than wool.

No Fair Trade Practice rules have been issued for the rug industry, although the Federal Trade Commission has ruled, in a decision upheld by the courts, that a rug labeled "Wilton" must actually be a Wilton weave and nothing else. Of Wilton and other weaves we give information below.

With informative labels lacking, the first caution on consumers' lists should be never to judge a rug by the type of its weave. Time was when this sort of thing worked, and there was almost a hierarchy of rug qualities, based on their weave. But today rug weave is neither an indication of rug quality or rug value. "The use of the names of weaves as a quality characteristic is a 30-year-old delusion and snare from which reputable manufacturers are trying to protect the consumer," is the way one outstanding rug engineer puts it.

To know rug quality consumers must become experts in "feeling" the fabric, judging its flexibility, ruggedness, and density, and the firmness of its weave by handling it. This requires practice, to be sure, but knowing a little about structure of the different weaves partly reduces the guesswork.

First, then, some information about the more common weaves.

WILTON: THIS IS SO CONSTRUCTED THAT for each color in the pattern there is a separate wool yarn woven in the rug. If there are three colors in the pattern, three separate wool yarns form the rug pile (or surface). If a Wilton pattern is blue, red, and yellow, for example, a blue yarn, a red yarn, and a yellow yarn are used to weave the pile. When a selected color appears on the surface—red, for example—the other two yarns are woven in the body of the rug. When blue is called for, the red and yellow yarns in this case are buried in the rug, and so on. By an intricate and ingenious loom, called the Jacquard loom, an artist can design a rug with as many as six different colors in it, and the machine will reproduce that design exactly on the surface of the rug. The quality value of a Wilton lies in these buried woolen yarns; they increase the rug's back thickness and its ruggedness and may increase the wear of the rug. The added cost for these added yarns may buy more rug luxury, but it is an expensive way of buying rug durability.

A Wilton rug usually has a short pile. The rugs are usually figured, have at least two colors in their pattern, but more often have four or five different colors, each one woven with a separate yarn. They have flexible, tough backs. The design is clear-cut and distinct, with no blurred outlines.

Brussels weave is the same as a Wilton but has a loop-pile rather than a cut-pile. It is rarely seen today.

AXMINSTER: THIS IS THE MOST POPULAR OF all rugs. It can be easily identified—particularly in the lower-priced brackets—by pronounced ridges on its back, and by the fact that you can roll it lengthwise, but not crosswise. Most of the wool of the Axminster is on the surface. There is no limit to the number of colors that may be used in the design—an important consideration for consumers with an eye to style. You can usually be confident that a multi-figured rug with heavy ridges on its back is an Axminster weave.

VELVET: THIS IS THE SIMPLEST TYPE OF weave, and the better grades are very durable. Most solid-colored rugs are of velvet construction. Economy comes with durability in plain weaves, because mass production methods have lowered the manufacturing costs. Velvets rank second as favorites on the American rug market. There are not as many figured, as plain, velvet rugs and carpets. There are, however, durable grades usually of low pile construction.

Tapestry rugs, in very little demand these days, are the same as velvet construction, except that the pile is formed of uncut loops. But there is an infant boom market in the making of velvets similar to tapestries such as the "looped pile" velvets. The big consumer advantage of these is that they get away from shading.

BIGGEST RUG FALLACY OF ALL IS THAT "broadloom" is a type of weave, a standard of quality, or a trademark of excellence. The term "broadloom" on a rug means nothing so far as the quality of that rug is concerned. It simply means that the rug has been woven on a broad loom—as wide as 18 feet—and is seamless. Any type or quality of rug may be broadloom. The term used in advertising often refers to the solid color velvet types.

Knowing the weave, the next step is to know quality and durability of the weave. Consumers should not make the mistake of putting down as a rule of thumb that rug weave has something to do with rug quality when they go to buy. It is possible to get high and low quality in all types of weaves.

The difference is not in the weave but in the construction and methods of manufacture of the rug itself.

That brings you head-on to the question: What makes rug quality?

First, the amount of wool in the rug. The more wool in the rug, the higher is its quality, all other things being equal.

Ask whether the wool in the rug is worsted or plain. If it is worsted, chances are that the price tag of the rug is high. But worsted rugs look well and wear well for those who can afford to buy them.

Sometimes rugs are treated with chemicals to impart a luster to simulate Orientals or antique rugs. While such treatment enhances the beauty of the rug, it may result in damage to the wool fibers, weakening them, and lowering the durability of the rug. Methods of treating rugs to give them "luster" have been developed to minimize this damage.

Second factor of rug quality is its construction underneath and on the surface. The *pile* of a rug—or the surface formed by hundreds and hundreds of little tufts of wool—is fastened to the foundation by jute or cotton yarns called "filling." These yarns primarily add to the firmness of the backing, and the more firm and flexible the rug back, the tighter and better woven these filling yarns are. This in turn adds to the general durability of the rug.

The rule is to take the back of the rug firmly in your hands, pull it, examine it closely to see if the firmness comes from tightly woven yarns or merely from sizing or artificial backing put into the rug to make up for a weak, loose weave. If the rug back feels sleazy, or thin, or if it lacks firmness and an elastic kind of pliability, the odds are against its being a high quality rug.

AFTER YOU BUY A RUG . . .

As important as wise selection of a rug is its care. Rug labels that give the consumer complete directions for cleaning are something to look for when you buy. Here are some tips on rug cleaning and care:

DIRT: It is a rug's greatest enemy. To check, use a vacuum cleaner once a day on traveled areas; give the rug a complete vacuuming once a week. Vacuum cleaners equipped with both suction and a brush or beater are most efficient. Carpet sweepers remove only the surface dirt from the rug. Hard sweeping with a broom usually drives more dirt into the rug than it takes out. If you do use a broom, choose one with soft bristles. Clean a rug in the direction where the pile lies. Brush the pile lightly when you have finished so that it will lie all in one direction.

Never beat a rug; this may snap the fibers and loosen the foundation. Shampooing the rug at home—unless the rug is a small one—is also bad practice. Send it to a reliable and experienced professional cleaner. So-called "dust-cleaning" may be injurious to the rug unless done by a reliable dealer who assures you the rug will not be subjected to severe beating.

MOTHS: Best check is regular vacuuming. Paradichlorbenzine sprinkled over the rug for a few days is a fair remedy; better is to have the rug professionally cleaned. "Clothes Moths" Leaflet 145, free from the Department of Agriculture, Washington, D. C., gives moth remedies.

STAINS: Don't attempt to remove until you have learned from the maker of the rug how various solvents will react on the dyes. A going-over with a cloth dampened with carbon tetrachloride may remove spots caused by ordinary dirt. "Stain Removal From Fabrics," Farmers' Bulletin 1474, free from the Department of Agriculture, Washington, D. C., tells how to get rid of specific stains. *Consumers' Guide* for May 9, 1938, also has this information.

PILE BENDING OR CRUSHING: Steam the pile by placing a wet cloth over it and applying a hot iron. Then brush pile in its natural direction. This is the simplest household remedy for pile crushing, which shows up particularly in the form of "streaks" on plain-colored rugs.

HOLES, TEARS, ETC.: Can be repaired by expert weavers. Be sure the yarns have been properly matched by securing them direct from the manufacturer of the rug.

On top of the rug, durability is determined first by the *density* of the pile; second, by the *height* of the pile.

Density of the pile, National Bureau of Standards experts have found after exhaustive tests, tells more than anything else about rug quality.

By density is usually meant the amount of wool in any unit area of the pile—say a square inch. So far no standards have been developed for expressing the quality of a rug by its wool content. Because even if two rugs had the same amount of wool in their pile, their durability might not be the same. This is because wool qualities vary, wool blends are different with every manufacturer, and methods of weaving the wool might have something to do with the quality of the rug.

FOR THE CONSUMER TO ESTIMATE THE density of a rug it is necessary to determine the number of wool tufts in each square inch. To get this number you must know the *pitch* of the rug and the number of *wires* it has.

Pitch of the rug means the number of tufts per inch across the width of the rug. You can count these on the surface of the rug, but easier to count are the number of little squares on the back of the rug, each of which represents a tuft. Be sure to count these in the width.

Wires means the number of rows of tufts per inch in the lengthwise direction. Again it is usually easier to count these on the back of the rug.

To get the number of tufts in each square inch, you multiply the pitch number by the wires number. If the pitch is 7 and the wires 8, the rug has 56 tufts per square inch. Unless one knows the size of the yarn used, the number of tufts does not accurately reveal the amount of wool per square inch. Consequently it is only a measure of the closeness of the backing construction and does not always give any hint of the surface durability.

Height of the pile is important. It is a rule, that, other things being equal, the higher the pile of the rug, the longer it will wear.

Establishing standards for density, size of yarn, and pile would be a simpler way of setting up a consumer buying guide for rugs than letting the consumer guess at these things for himself. Such scientific standards are still in the laboratory stage. But some day consumers may be able to buy rugs according to simple standards.

NATIONAL BUREAU OF STANDARDS SCIENtists have developed a "wear testing machine" for measuring wear on rugs. Still in its experimental stages, the machine—used by most rug makers in their own laboratories—in a few days can show how a rug will wear over a period of years. Rug buyers of the future may find that a rug label

THE GLASS beaker will get so full, then the rug tuft will snap loose. This is one way researchers have of testing the durability of the wool tufts that form the pile of a rug. For consumers, such research may hasten the time when scientific standards may be set to define quality.

will tell them how samples of that rug stood up under tests of the perfected machine.

Such a test was made on two rugs. Rug A sold for $6.85 a square yard, rug B for $5.25 a square yard. It took 300,000 revolutions of the wear-testing machine to wear the pile off rug A, and 75,000 revolutions to wear down rug B. Those figures on a label would tell a consumer that by paying one-third more for rug A, he could get a rug that would wear 3 times as long as rug B. Of course, consumers should not take this to mean that as an absolute rule a rug priced slightly higher than another rug will have many more times the wear of the lower-priced product. Sometimes this may be true, but until tests for wear reach the perfection stage, consumers will have no way of knowing this fact merely by looking at the price tag.

The National Bureau of Standards, in cooperation with a number of rug manufacturers, has laid down in a large Washington building a whole corridor full of rugs of different quality. One million pairs of feet have already passed over those rugs, and some of the rugs are beginning to show signs of wearing out completely. When this experiment is completed, the Bureau experts will be in a better position to say whether the results obtained from the wear-testing machine are comparable to actual use tests.

There is a point reached in the making of a rug where added cost means you are paying for luxury, for the luxury of deep, thick pile, for the luxury of a rich finish, for the luxury of exotic design and shadings. These higher priced rugs may wear more, of course, but dollar for dollar, if you are after durability, you will save more by buying in the medium or lower-priced ranges.

Learn the "feel" of a rug. Ask the salesman to show you two similar weaves but of different price. Dig your finger into the pile. Does it feel high? Is it thick? Is it hard to feel the foundation threads? Is the rug flexible, rugged, and sturdy? Are the yarns smooth and soft, and do they show spring and lots of "life?" If these things are true, then you have a good rug. A poorer rug will feel less sturdy, won't have a thick pile, and you will be able to feel the foundation with your finger tip. The yarns will be coarse and feel "thin" and sparse. A few tests like this, and you soon will be able to distinguish a good rug from a poor one.

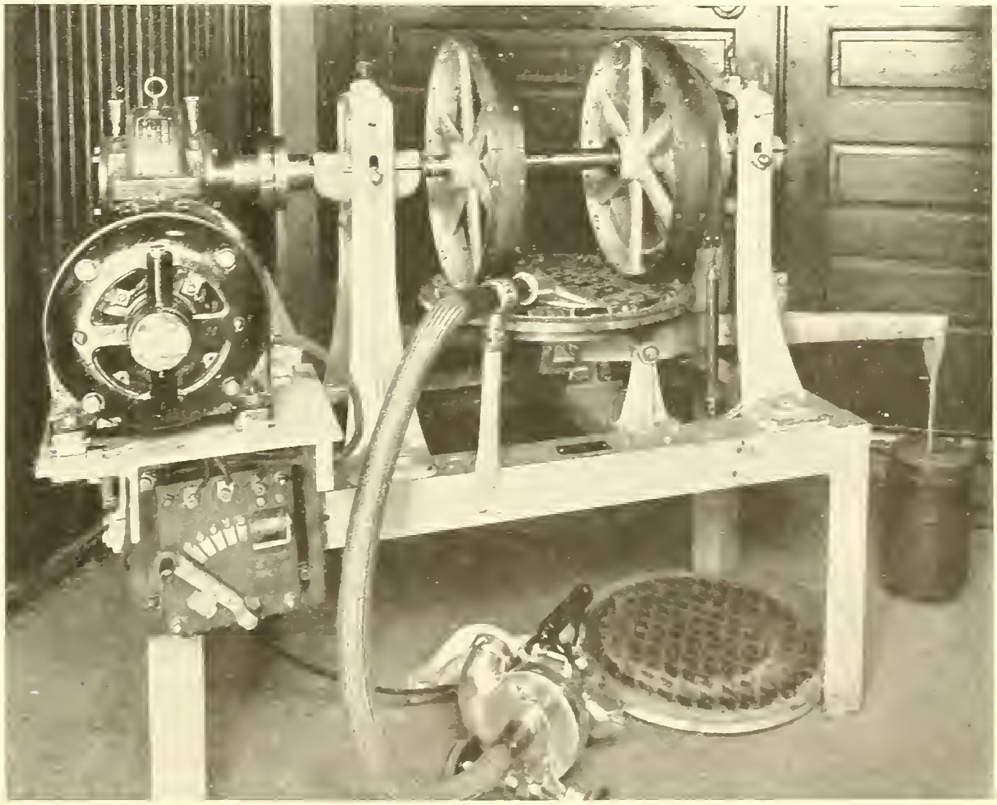
On an Axminster rug, count on the back of the rug the rows of tufts per inch. Four rows means it is of good quality, will serve you well, and will be low in price. For about twice as much, you will be able to buy an Axminster with seven rows to the inch. This rug will wear far more than twice as long and will be well worth the investment if you can afford to spend the extra money. This is true of Axminsters only, but if you buy a rug only once over a long period of years, it will pay you to put out the extra cash and get a rug that will be durable and long-lasting.

With velvets it is not so easy to determine the quality aside from the "feel" of the rug. But remember that if you are after long wear and are not so concerned with appearance, then a plain colored velvet is quite likely to give more wear per dollar than the figured types.

Likewise, if you choose a Wilton, dollar for dollar, you will get better quality in a Wilton with only two colors in its pattern than one of the same price with four or more colors in the pattern. Here again you make your choice of durability as against beauty and appearance.

Generally then, a good rug should be firmly woven, with no excessive sizing or filling in the body. The tufts should be closely spaced; there should be no wide gap at the base when you bend the rug between two rows of tufts. Pile should be upright, sturdy, should resist pulling, bending, and crushing. Rubber or composition backing sometimes makes the rug stronger, but be sure inclusion of these does not sacrifice a tight and flexible firm weave. And finally, look for a rug with a label that tells you something about construction as well as design.

EXPERTS in the National Bureau of Standards have devised this machine to test the durability of rugs. Still in its experimental stages, it may some day be used as the basis for setting up quality specifications for rugs. With it scientists hope to be able to predict how rugs will stand up in actual use.



Financing Freedom from Household Drudgery

The Electric Home and Farm Authority lights homes and lightens burdens by enabling consumers to buy electrical appliances on reasonable terms

HOUDINI WAS SUPPOSED once to have tried for hours to get out of a cell just to prove how competent an escapist he was. Exhausted after his labors and still locked up, he leaned finnally against the iron door which held him in, only to have it open with his weight and dump him in the corridor free. As a joke, the jailer hadn't even locked the cell.

It was no joke that men weren't free up until the time they learned to make the water and wind and the forces of nature work for them. But now there is power in the world to do a thousand chores men need to have done and to do it at a lift of the hand. There's freedom from drudgery in the world for men, but somehow, even if the door is unlocked to it, men aren't free yet.

EHFA

Standing between what the world of today offers and what the rank and file of the world can afford are incomes. What you can't afford, you can't enjoy.

ELECTRICITY WHICH COULD LIGHT UP A NEW Declaration of Independence flows through the world in currents which never reach to many homes.

A long line of brilliant men pooled their achievements to give us electricity, and today people are pooling their best wits to put it to work for us.

Great public power projects in the South and West are generating electricity. Through the Rural Electrification Administration, farmers are enabled cooperatively to form associations for the purpose of stringing wires which will pour electric current into their homes and barns.

Then when wires are strung along poles up to homes and electric lights are glowing in rooms where oil lamps and candles flickered before, another Government agency seeks to help families buy the appliances which electricity needs to give a family freedom.

That agency is the Electric Home and Farm Authority. And it deals in something which is almost as mystifying as electricity—credit.

In 5 years, up through May 31 of this year, the Electric Home and Farm Authority helped by means of credit to place in American homes and farms more than 141,000 major electric appliances—refrigerators, water heaters, ranges, washing machines, milking machines, feed grinders.

In addition, hundreds of American families got a hand in wiring their homes for electricity.

WITH ALL THIS TO ITS CREDIT, THE AUTHORity has not cost the Government a cent. In fact, it has made money.

The Authority does not sell anything, and does not give anything away. What it does is enable consumers to purchase electric ap-

GIANT power projects over the United States generate electricity, but the wires still have not been strung up to 3 out of 4 farm homes. The Rural Electrification Administration is making it possible for more farmers to move out of the Dark Age into the Light and Power Age.

pliances on time payments, over longer periods of time than are usually permitted, at interest rates lower than most consumers ordinarily pay.

Under the Electric Home and Farm Authority plan, consumers may buy specified electric appliances (and some gas appliances) from designated dealers, on time-payment plans, at an interest cost of 5 percent per year on the original unpaid balance of the purchase price.

Five percent on the original balance of the purchase price amounts to a true interest rate of about 10 percent a year, as readers of the series of articles on credit in the *Consumers' Guide* know.

If a consumer purchases an approved electric appliance from an approved dealer, he may make a down payment as low as 5 percent of the total cost of the appliance. Then he may have as much as 4 years to pay up the balance. The average period of contracts financed by the Electric Home and Farm Authority is about 24 months.

Ordinarily dealers in appliances cannot afford to wait so long for their money. Finance companies ordinarily charge more for interest than consumers can afford to pay. This is where the Authority steps in.

It takes the consumer's note from the dealer and gives the dealer cash for it. The consumer makes his payments with his light bill to the utility, which passes them along to the Electric Home and Farm Authority. The utility is paid a fee for its billing and collecting services.

Purchases of equipment are thus made possible which consumers couldn't make except for the very easy credit, and which dealers couldn't finance except for the easy credit.

Private sales finance companies, lending money for the purchase of appliances, since the beginning of EHFA operations are said to have lowered their interest rates.

THE AUTHORITY GETS MONEY TO LEND TO consumers, for that is what it actually does, by borrowing money from banks at interest rates of from 1 to $1\frac{1}{2}$ percent a year. The difference between the 1 to $1\frac{1}{2}$ percent it pays and the 5 percent it collects pays the expenses of the agency, provides for reserves against bad loans, and nets the agency a small profit.

Financing is limited to purchases where the balance due is more than $40. At least 5 percent and sometimes 10 percent is required as a down payment on whatever is purchased. "Only labor saving equipment and devices which contribute to a higher standard of living and which cannot be purchased for cash by the average family without undue hardship" are purchasable under the plan.

Only in communities where rates are low enough to make the use of electric or gas appliances economical is the EHFA plan available. Where high electric or gas rates prevail, the Authority does not encourage consumers to buy appliances.

Appliances which the Electric Home and Farm Authority helps consumers buy are these: Refrigerators, ranges, water heaters, furnaces, water pumps, conversion oil burners, coal stokers, milk coolers, cream separators, farm motors, milking machines, feed grinders, washing machines, ironers, portable space heaters, dish washers, waste disposal units, attic ventilating fans, vacuum cleaners, and radios.

CONSUMERS ARE SELDOM EXPERTS IN JUDGing electrical appliances. Nor is there any grading system universally recognized and used for labeling such articles. When the Federal Government buys it calls for bids on the basis of specifications, carefully prepared by experts; and when sales are completed, the Federal Government can, if it wishes, test the articles to see if they measure up to specifications. Some of the large electric utility companies, selling appliances as well as service, have them examined by private testing laboratories. But as yet neither specifications nor testing methods used by the Federal Government or by private industry for electrical goods offered to consumers have become standardized to help household buyers distinguish quality differences between similar electrical goods.

Quite the opposite situation holds in the sale of machinery and equipment for the transmission of electrical power. Here almost everything is bought and sold on specification. Household buyers of appliances which operate with electricity are left largely to the hazards of their own uninformed choices, although wrong guesses are often infinitely more serious to them.

When the EHFA set up shop 5 years ago, the Authority proposed to set specifications of quality and performance for appliances whose sale to consumers it would finance. This plan was dropped. Now manufacturers simply file their own specifications with the EHFA. An engineer on the saff of the EHFA undertakes to review these specifications. The principal check made, however, concerns the reliability of the retailer who is selling the appliance and of the manufacturer who made it.

UTILITIES WHICH DO BUSINESS WITH THE COoperation of the Authority are on a preferred list, you might say. Altogether there are now 406 of these utilities. Of these 34 are privately owned, 120 are municipally owned, 1 is operated by TVA, and 251 are cooperative associations. The 251 cooperatives, incidentally, were organized either with the help of the Tennessee Valley Authority or the Rural Electrification Administration.

Many farm families, not so lucky as their neighbors, noting the installation of electric appliances in their neighbors' homes when they did not even have electric wiring in their own homes, set up an insistent demand for a credit plan whereby they could get their own homes wired and pay on time.

To get electric light to families living in the twilight of coal oil lamps, the Authority last year established a plan by which families may pay over a period of 24 months for having their homes wired. The Authority requires that the wiring be guaranteed at least for the time the family is making payments on it.

Installation of wiring and plumbing together with fixtures has been financed by the Rural Electrification Administration for

EVEN after electric wires come to the farm, the cost of appliances denies many families the benefits of electricity. The Electric Home and Farm Authority finances the sale of appliances to lighten the burden of work in the home and make production on the farm more efficient.

those consumers whose farms and homes are on REA project lines. The REA has charged 6 percent true interest per year for this financing. Specifications for both wiring and plumbing have been adopted. At present the Rural Electrification Administration is going in for some financing of other appliances, such as irrigation pumps and brooders, and specifications for these appliances too are being developed.

The Electric Home and Farm Authority has discovered that, by and large, American families are good credit risks. The losses of the Authority from all causes, including the failure of a family to pay, amounted to slightly less than one-sixth of one percent of the total collections and credits during the 5 years of its operation. This was easily covered by the Authority's reserve for losses.

CONSUMERS FAMILIAR WITH INSTALLMENT buying will find the language of EHFA contracts similar to that found in the more common commercial types covering time purchases of electrical appliances. Like commercial contracts, EHFA's give no specific guaranty that payment is conditional upon the appliance's proper performance. The Authority does, however, use its offices to resolve differences arising between buyers who believe an appliance has not measured up to claims made for it and the firm which made the sale. As is usually done in commercial practice, also, EHFA contracts provide that when several appliances are purchased, all appliances remain as security and hence are subject to repossession for delinquency in payment.

The Authority is sympathetic when its debtors fall on hard times. Where death occurs in a family, or illness strikes, or setbacks of one kind or another make it difficult for a family to meet its payments, the Authority extends the time of payment—if necessary, permits families to skip payments, and in other ways avoids the necessity of having appliances repossessed from consumers.

Last year the Authority financed the sale of nearly 8 million dollars' worth of appliances. That may not seem like much when you measure the 8 million against the billions of dollars which would be necessary if all American families actually were permitted to live in the Age of Electricity. To the credit of the Electric Home and Farm Authority, however, there stands this fact: Some homes which would otherwise be shadowed are lighted by electricity, and some families have been freed from the drudgery to which they were condemned before they entered the Power Age.

ON THE CONSUMER FRONT

MAGNA CARTA, the basic document from which historians trace many of the rights and liberties we have today, has one article which bears down hard on a present-day consumer problem, weights and measures.

When King John at Runnymede on that fateful day in 1215 for the salvation of his soul yielded up this charter, he also promised to install in England a system of uniform weights and measures.

Translated from the Latin in which the Magna Carta was written, the weights and measures guaranty reads, "There shall be one measure of wine and one of ale through our whole realm; and one measure of corn, that is to say, the London quarter; and one breadth of dyed cloth, and russets, and haberjeets, that is to say, two ells within the lists; and it shall be of weights as it is of measure."

The United States is some 724 years behind this development, since it still does not have legislation making one system of weights and measures mandatory throughout the country.

While the United States has been lagging behind, the world has gone ahead until today consumers are now asking not only for standards of quality but also standards of quality for the products they buy.

DETECTING ALL THE VARIANTS OF WEIGHTS and measures violations has become so complex and technical a job in New York City that a school has been established to train weights and measures inspectors.

In the graduating class of this school this summer were several hundred young detectives who will put their science to work henceforth in an attempt to make sure that New York's consumers get the quantities they pay for, whether they are paying for coal, or gasoline, or bread, or tea, or candy, or anything else that is sold by weight or measure, and to make equally sure that merchants who count, weigh, and measure accurately do not suffer unfair competition from those who don't.

Exposure of one trick alone should have won these students the Weights and Measures equivalent of a Ph.D. cum laude. This trick involved the use of what has been called the "Million Dollar Scale." It was a scale without any hidden springs or foot treadles. Instead, with the simplicity of genius, the chiseler who devised it had simply substituted a 25 pound dial face for the original 20 pound dial face. With its face lifted, the scale automatically registered a 5 pound purchase as a 6¼ pound purchase.

Dodges like these require training to detect, but today in New York, at least, the weights and measures inspectors are getting their training in school.

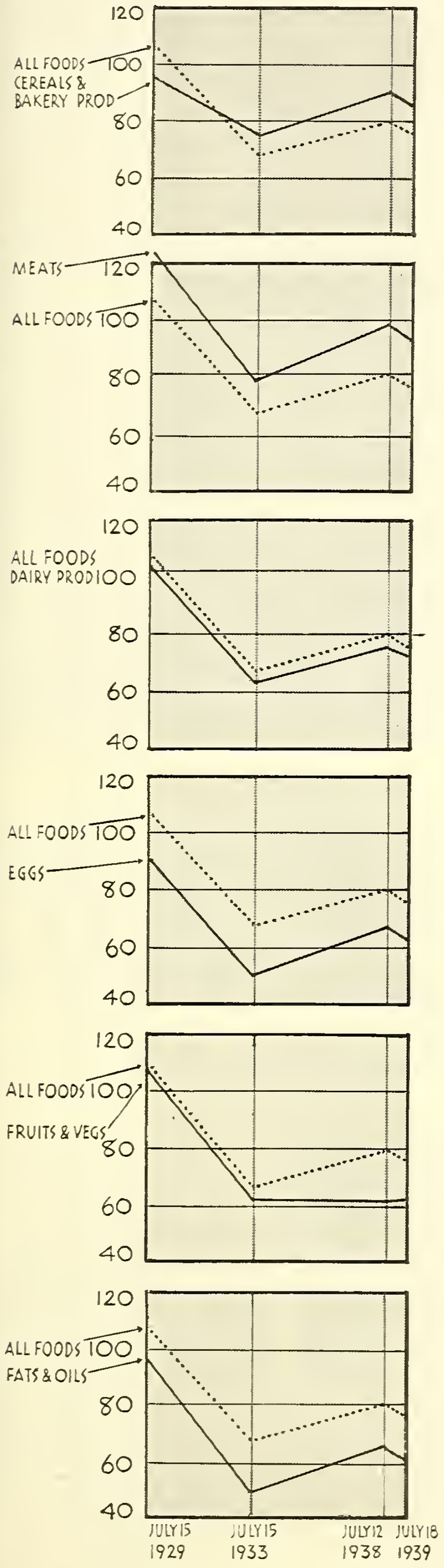
EVERY CONSUMER IS INVITED TO BE HIS OWN checkweighman by one Omaha department store. This store, which sells meat, placed a regular butcher's scale out in one of its aisles and invited consumers to weigh what they had bought to make sure that they actually received the amount they had paid for.

Omaha consumers, who, according to a statement by the Consumers' Council of Omaha, are struggling along with less than adequate weights and measures protection because of an inadequate budget for this purpose, like the idea.

CHECK WEIGHING

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE



FOOD COSTS. Consumers' food basket in July stepped up in cost very slightly (three-tenths of 1 percent) from the 1939 low point reached in June, but cost less than in any July since 1934. Since February this year changes in food costs in general have been very small.

Compared with last year food costs are down about 4.5 percent. Fresh fruits and vegetables as a group are the only types of foods now selling at prices above their 1938 level, but this increase is relatively small. Costs in general are 28 percent below the high July of recent years which came in 1929, and 12 percent above the low July of 1932.

September usually finds pear shipments at their season's high point. Seasonal increases also generally occur in marketings of apples, grapes, late crop potatoes, cabbage and onions, sweetpotatoes, poultry, pork, lower grade beef and lamb.

CANNED VEGETABLES. A decrease of from 10 to 15 percent from the record supply level of the 1939–40 season, which has just ended, is expected. Supplies probably will be above consumption levels of recent years.

FRESH VEGETABLES. More onions and sweetpotatoes but less domestic cabbage and potatoes than in 1938 are in prospect from the areas producing for shipment in the fall and winter months.

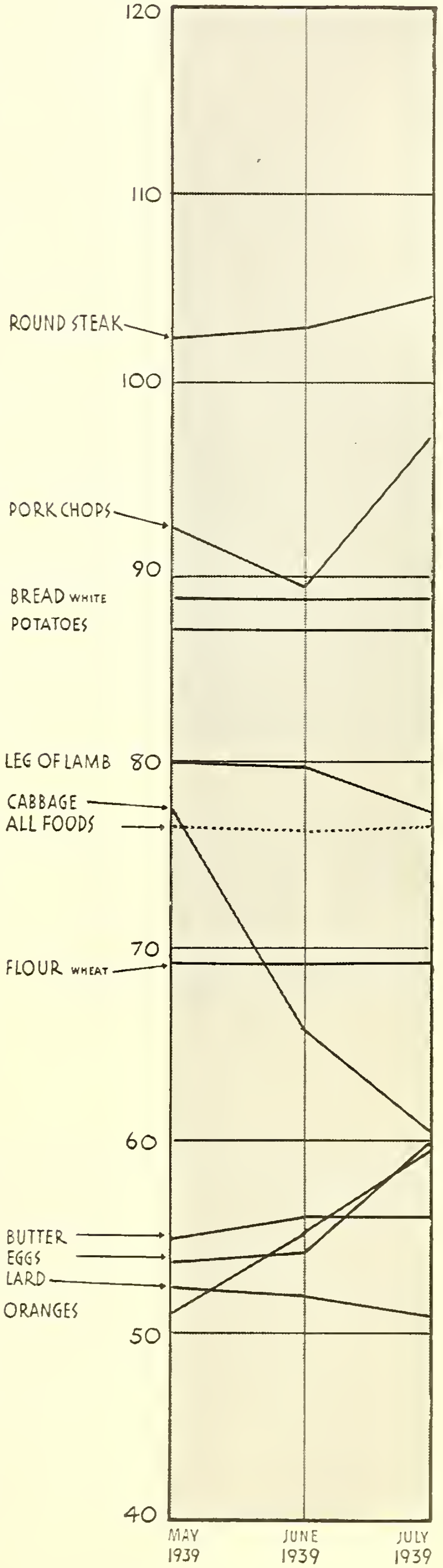
FRUITS. Apple production about 25 percent larger than in 1938 is in prospect. Pear and grape production still is estimated to be slightly smaller than the big crops of last year.

EGGS. Production continues high for this time of the year, and it looks as though eggs will continue to be more plentiful than in 1938.

DAIRY PRODUCTS. Supplies probably won't be as large as last year, when they reached a record high point, but it appears that they will be above levels of other recent years.

CEREALS. While wheat and rice supplies most likely will drop below their 1938 levels, they probably will be above the amounts used in recent years.

A CLOSE-UP



IN THIS ISSUE

SEPTEMBER 1939 ● VOLUME VI, NUMBER 7

Making Plans Grow Like Plants . . . 3
Tips for Rug Buyers 7
Financing Freedom from Household Drudgery 12
On the Consumer Front 14
Your Food Supplies and Costs 15

U. S. GOVERNMENT PRINTING OFFICE 172114°

DAYTON

LIBRARY
RECEIVED
JAN 8 - 1945
U.S. DEPT. OF AGRICULTURE

CONSUMERS' GUIDE

OCTOBER 1, 1939

APPLES

OUNCES AND INCHES

Facts on food supplies page 13

CONSUMERS' GUIDE

OCT. 1, 1939 VOLUME VI, NUMBER 8

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.

MARY TAYLOR, Editor

WAR sometimes acts like a derrick in pulling to the surface socially dangerous emotions that can gravely complicate everyday living; panic that there will not be enough of the necessities of life to go around; of sellers that seek to make an extra profit out of that fear; avarice of buyers who try to corner an extra share of the supply of goods.

KNOWING THE FACTS ABOUT ECONOMIC conditions in our own country is the strongest leash that individual consumers can put on emotions such as these. Facts about supplies, about demand, about prices. Knowing such facts is a protection both against fear of want and insecurity and against unfair advantages which some may be tempted to take in the stress of war conditions.

"WE ARE NOT IN WAR," SECRETARY HENRY A. Wallace reminded consumers and merchants in a broadcast on September 8, "and we have an abundance of practically all kinds of food." The solid foundation for such a statement is presented in our summary of food supplies which appears on page 13. The facts and figures in this article are your protection against the kind of alarms that spread through the country almost immediately after the beginning of war abroad on September 1. You can do yourself a service by reading and carefully noting the facts it presents. You can do your neighbor a service by passing along this summary of the food supply situation.

"WE HAVE IN AGRICULTURE A MECHANISM which in a measure does for agriculture what the Government insurance of bank deposits does for banks." continued Secretary Wallace. "Today no one would rush to a bank to get his money out because he knows that the Federal Government has set up bank reserves to protect him. In the same way in agriculture, the Government has provided certain reserves. Through the Ever Normal Granary, plentiful quantities of wheat and corn and cotton have been stored by the farmers and the Government. When housewives know as much about the Ever Normal Granary as bank depositors know about the Federal Deposit Insurance Corporation, there will be as little likelihood of a run on grocery stores as there now is of runs on banks." (In a later issue we will explain the principles and operations of the Ever Normal Granary.)

EQUAL OBLIGATION TO PULL TOGETHER rests on and is accepted by the makers and merchants of goods. As September drew to a close, one trade association after another took the patriotic stand that none of its members should turn to selfish account the stresses of war conditions. Wise merchants and other groups realize that it is to their interest, as much as to consumers', to control any minority which might attempt to profiteer on war scares.

THERE IS NO LAW MAKING PROFITEERING illegal unless there is clearly established a conspiracy in restraint of trade. Protection against profiteering rests on community support of those of longer vision who are ready to set aside immediate gains for the common good. Each community will develop its own technique for coalescing such support. *Consumers' Guide* would welcome a report from you on what your community is doing in this direction.

FARM LEADERS, BUSINESS MEN, AND PUBLIC officials concerned with food and fiber production and marketing were invited early in September to form an Agricultural Advisory Council to work with the Department of Agriculture in meeting emergency problems provoked by war conditions abroad.

"It is of primary importance," said the Secretary in his invitation to these men to join the Council, "to do everything possible to keep us out of war. We, therefore, should make studies of the necessary action to keep us at peace without placing impossible burdens on any large section of our population."

First meeting of the Council occurred in Washington on September 19. "The war in Europe," the Council stated at the conclusion of this meeting, "will strengthen many farm prices here, but consumers need have no fear of shortage or runaway prices. Such advances in farm prices as may occur will tend to restore the balance between farm and city prices and help to bring about normal business and employment.

"We are in a much better all-around position to meet emergencies than we were at the outbreak of the last war. From farm to kitchen, the whole system of producing, processing, and distributing has been greatly simplified and improved.

"The Department of Agriculture, with the full cooperation of the groups represented by this Council, is the medium through which the efforts of the agencies represented here can be most effective.

"Whatever is done, must be done through voluntary means without regimentation. Action should be directed toward securing and maintaining proper balance by means of fair prices for farm products, fair wages for labor, and fair profits for business.

"It should be emphasized that the prices of most farm products are still low, despite some recent increases, and that the general welfare demands that the prices of farm products rise to their proper relationship with other prices and wages."

DISTRIBUTION OF SURPLUS FOODS GOES ON, as we report in the lead story in this issue, as further evidence that there is no ground for alarm over the food resources of this country, and in recognition of the fact that millions of families continue to depend on relief for their essentials of living. Since our article on Dayton was prepared, the Federal Surplus Commodities Corporation has announced the extension of its Food-Stamp Plan to a seventh city, Springfield, Ill. The record in six cities has justified, in the opinion of the Secretary, the gradual extension of the Plan to other cities throughout the country.

TUNE IN ON "CONSUMER TIME" EVERY Tuesday at 1:45 p. m., Eastern Standard Time, for a round-up of facts on what's happening to food supplies and prices. Each week Consumers' Counsel D. E. Montgomery gives a 3-minute summary at the close of this program broadcast over the NBC Red Network.

"I know no safe depository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them but to inform their discretion by education."

—*Thomas Jefferson.*

Dayton Works Out Wrinkles in the Food Stamp Plan

One of six cities to try out the new experiment in better nutrition, Dayton, Ohio, shows how stamps can pull farm surpluses through commercial channels and into the market baskets of poorly fed citizens

"**JIM**—that was my husband—made good money in the refrigerator factory here. He even lasted through the layoffs, but he took sick and went to the State hospital. Now it looks like he ain't never going to recover. That just leaves me and mama and the babies. There're 4 of them.

"Course, in 2 more years mama is going to get a pension.

"I do say, sitting here where I can see this thing, the stamps are a help.

"Take my littlest boy there, Edgar. He's 5, and I declare I never had to doctor any child like him. Seems like he needed doctoring everytime I turned around. Now look at him. I got to say he speaks slow still and those legs of his are as spindly as a winter weed, but he's so lively now, I swear sometimes I can't keep up with him.

"Moving out of that furnished room up here where he could get into the sun helped. And now he gets fruits, too, that I get with the blue stamps.

"You can't tell me that you can raise a child right on flour and dried beans. It can't be done.

"Before the stamps came along the doctor would order oranges for him, but oranges were so scarce-priced.

"Now I don't have to worry about that any more. I have some fruits and eggs and butter and vegetables in the kitchen all the time.

"You can say for me I like the stamp plan. Now some people complain about it because they don't understand it. Like I heard the other day, a man on WPA said it was just a trick. He didn't understand. It's easy to understand though.

"I'm allowed six sixty-five a week for food. I don't get it in money though, I get it on a voucher that's good in any grocery store. The relief here gives us that. That's for the 6 of us, mama and me and the 4 children. Now along comes the Government, and gives me 3 dollars' worth of blue stamps with my relief order. That's fifty cents a week a person.

"I take these blue stamps and go into a grocery store and spend them just like money.

"If I was on the mother's pension, where I hope to be, and getting relief in cash then I would do it different. Then I would take my money and one dollar's worth of orange-colored stamps a week for every person in my family. Then for every dollar's worth of orange-colored stamps I bought I would get 50 cents worth of blue stamps free.

"That's the whole thing, and there ain't nothing hard to understand about that, but, as I say, they are some people who are suspicious."

THAT WAS MRS. MAJOR* TALKING, AND, AS her mother said from the mission oak chair in which she rocked back and forth, "she could talk, but there was truth in what she was saying."

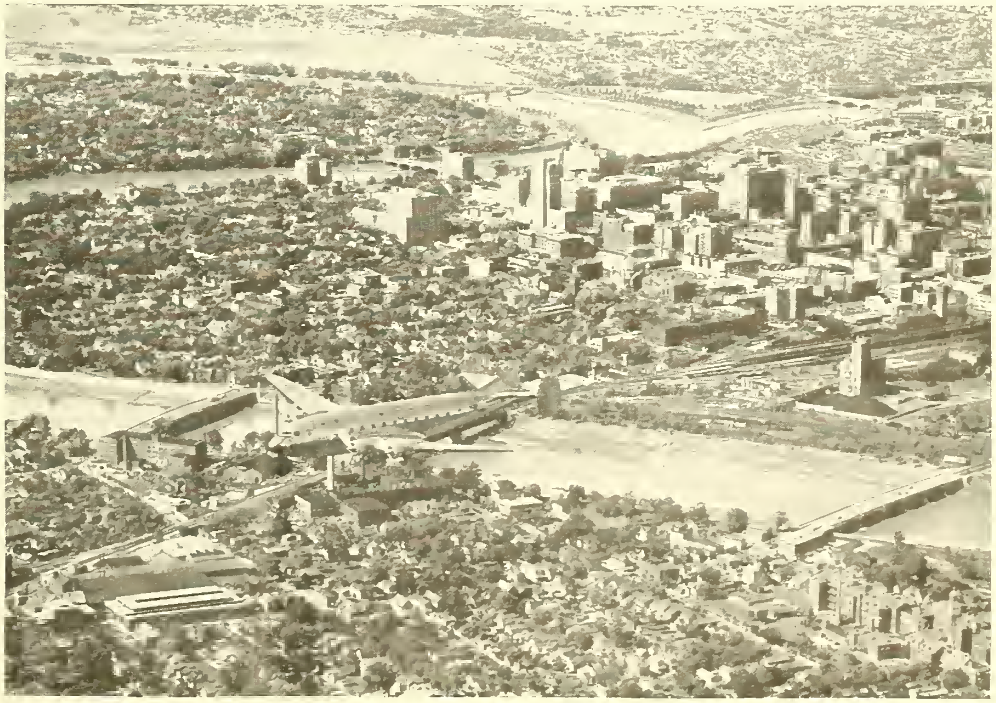
Dayton, or rather Pop Dayton, represented in cartoons as an old, dignified, but rather harassed gentleman in glasses, would say there was truth in it, too.

Pop Dayton seems rather pleased that Dayton is the Stamp-Plan City.

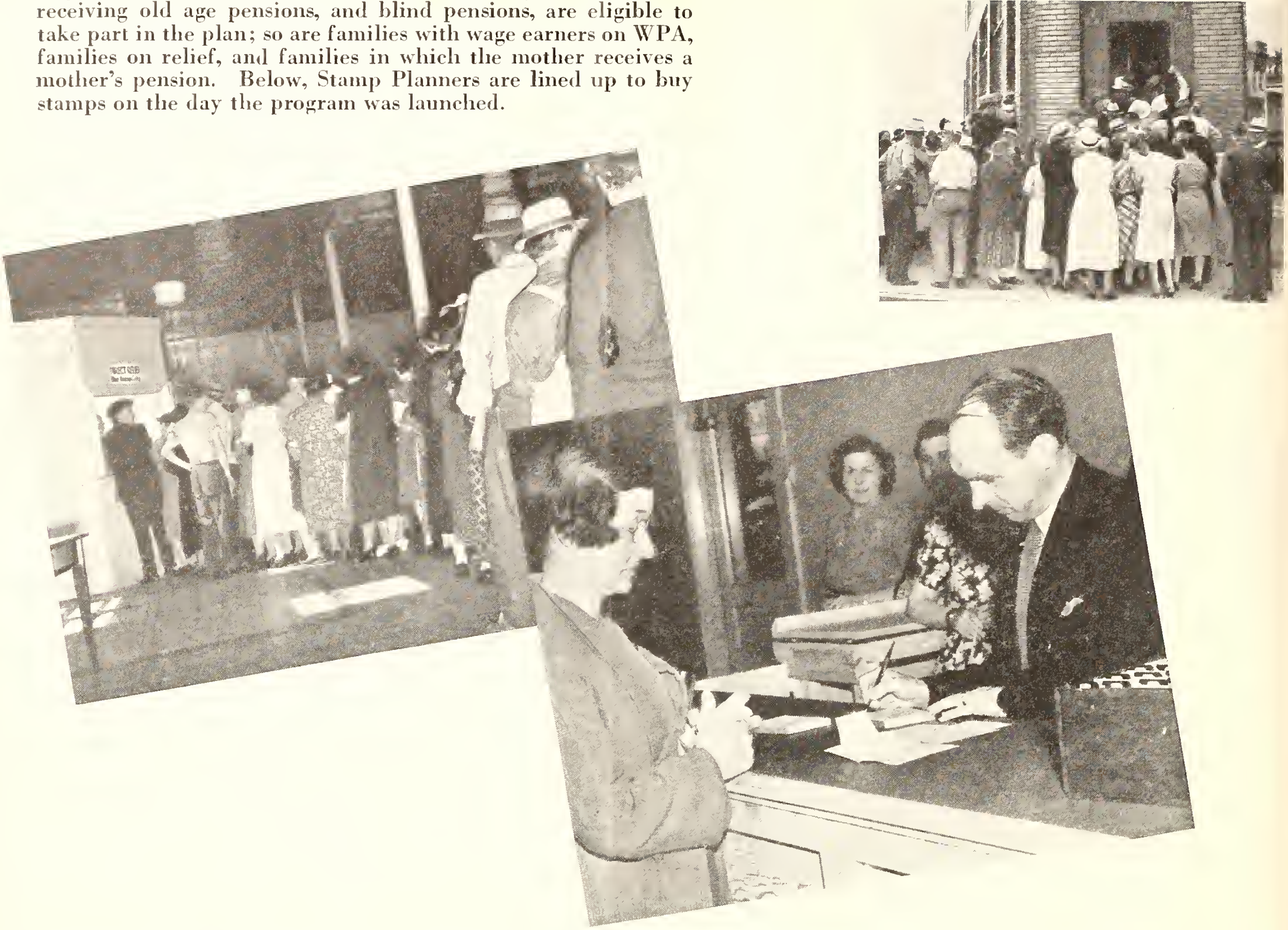
---

* None of the names given here identify the persons interviewed.

DAYTON is one of America's 6 Stamp Plan Cities. Along with Birmingham, Des Moines, Rochester, Seattle, and Shawnee, Oklahoma, this Ohio City is trying out the latest technique for feeding the undernourished in the cities with surplus foods from farms.



THIRTY THOUSAND of Dayton's 215,000 population are eligible to participate directly in the Food Stamp Plan. Persons receiving old age pensions, and blind pensions, are eligible to take part in the plan; so are families with wage earners on WPA, families on relief, and families in which the mother receives a mother's pension. Below, Stamp Planners are lined up to buy stamps on the day the program was launched.



Before the Stamp Plan, he might have said that Dayton was the Cash-Register City. It's the birthplace of the cash register. He could have said that Dayton was the mother of the airplane. The Wright brothers owned a bicycle repair shop in Dayton when they developed the airplane. He might have said that it was the Self-Starter City, because the self starter for automobiles was invented there. Or that it was the Refrigerator City, because electric refrigerators were developed in Dayton. It pioneered the city-manager form of government; it was the first city to act on flood prevention. Poetically, Pop Dayton sometimes calls the city the gem of the greater Miami valley. When he talks about thriftiness and the traditional virtues he says that Dayton is the mother of the building and loan association.

But stop a man on the street now and he will say that Dayton is the Stamp-Plan City.

Dayton isn't the only city to have the Stamp Plan. It is being tried out in Rochester, New York; Birmingham, Alabama; Seattle, Washington; Des Moines, Iowa; and Pottawatomie County, Oklahoma, which includes the city of Shawnee.

"We fought to get the Stamp Plan here," say Dayton's grocers.

"We are fighting our hardest to make it work here, and we're going to see that it does work."

ON JUNE 5 THIS SUMMER—THE FIRST DAY of the Stamp Plan in Dayton—1,241 people walked past the iron railings on the first floor of the Barrar Building. They stood in line quietly, just as people stand in line on pay day to cash their checks. As they moved up to the counters of the unpainted carpentered booths, they showed the clerks there a card indicating that they were eligible to purchase or receive food stamps.

Their identification cards showed whether they received public assistance in cash or in the form of a grocery order. If they received cash, the clerk at the counter gave them a slip of paper which entitled them to buy, at the next window, a minimum of $1 worth of orange food stamps a week for each person in their families. With the orange stamps they received free 50 cents worth of blue stamps for each dollar of orange stamps they bought.

Families receiving aid in the form of a grocery voucher were given slips indicating they were eligible to receive free 50 cents worth of blue stamps a week for every member in their families. Both orange and blue stamps come only in 25-cent denomination.

Slowly filing past the counters and windows were aged men and women, widowed or deserted mothers of young children, blind persons, the unemployed who were able to work but couldn't find jobs, the unemployed who because of sickness or incapacity were unable to work, and workers on WPA.

The Government has declared a food dividend, one man in line said. Another flippantly asked for an air-mail stamp so he could fly home to dinner.

Not everyone in line knew just what was happening, but the persons ahead or behind were glad to explain. "Farmers," they said, "are producing more of some foods than they

This is an orange stamp.

Orange stamps are sold to families receiving government aid, $1 worth a week for each member of the family. They are used like money by families for the purchase of food or household articles sold in grocery stores.

This is a blue stamp.

Blue stamps are free. For each $1 worth of orange stamps a family buys, it gets 50 cents' worth of blue stamps. Dependent families with no cash to purchase orange stamps are given 50 cents' worth of blue stamps for each member each week. Blue stamps are as good as cash in grocery stores for the purchase of foods that have been designated as surplus by the Secretary of Agriculture.

can sell, and here we are in the city wanting food as bad as hunger can make a man want it. So what did the Government do?" The man explaining would answer his own question. "It did just what any sensible person would do. Thought up a plan to move the food from the farm where it was bankrupting farmers into the city where people can eat it."

DAYTON HAS A POPULATION OF ABOUT 215,000 persons. Of these, about 30,000 receive direct public aid. Of the others, 60,000 each month produce about 5,500 freight cars full of refrigerators and cash registers and electric motors and rubber products and golf clubs and a long list of other things that are sold throughout the United States. Another 4,000 work in the building trades; 17,000 go about buying and selling in some form or other; while 37,000 are teachers, and doctors, and lawyers, and hairdressers, and maids, and railway workers, right on down the list of the miscellaneous things that must be done to run a city.

Altogether 117,000 persons in Dayton are employed regularly. With their dependents they add up to 185,000 people who do not get direct public aid.

To them a chain store addressed some advertisements.

"The Government," these advertisements said, "shows housewives how to save on groceries." The ads took as their text the eight commodities which were put on the list of foods which could be purchased with blue stamps in the first month of the plan.

Everybody had read about the Stamp Plan, the ads said. "But . . . some of us may have overlooked the fact that in designating certain foods which are in extra abundance right now as those which may be purchased with the free blue stamps, the Government points to extra values available to every family at the same prices at which they are marked for those who hold the stamps . . . No matter where you buy your foods and no matter how much or how little you have to spend, it is smart and thrifty to buy plenty of butter, eggs, dried beans, corn meal, flour, prunes, fresh peaches, fresh tomatoes, onions (dry) and cabbage."

"While getting more for your money, you're helping to increase consumption, which increases farm incomes. Farmers can then buy more city goods. This means greater income for city workers. As often is the case, we help others by helping ourselves."

AFTER 2 MONTHS OF THE STAMP PLAN someone in the Dayton Chamber of Commerce explained it this way.

"Under the Stamp Plan from June 5 to July 31, $76,434 worth of orange stamps have been sold and $74,070 worth of blue stamps have been given out free.

"I know some people were disappointed that the distribution of blue stamps did not run up to the $100,000 a month that some people predicted. But look at the $74,000 worth of blue stamps that were distributed.

"They represent $74,000 worth of butter and eggs and beans and prunes and fruits and flour and corn meal and rice and cabbage and tomatoes and peas and onions that would never have come to Dayton. They represent just that much more good food that has been eaten here.

"And every one of those $74,000 worth of blue stamps is a dollar spent in Dayton that wouldn't have been spent here otherwise.

"The City has a revolving fund and from this fund it buys the orange stamps from the Government and gets the blue stamps free. Then it reimburses itself by selling the orange stamps to the people on relief. That only costs the city clerical help. In addition the city gives away the blue stamps.

"Now every blue stamp that is given out is spent in a grocery store. And each one of them is 25 cents' worth of additional receipts to the grocers of Dayton.

"But it doesn't stop there. The grocers cash these stamps at the banks for their full value, or pay their wholesalers with them. The wholesalers cash them, and they have that much more money to pay to farmers, or their help, or to railroads for bringing that $74,000 worth of food here, and to buy other goods."

WHEN THE WORD CAME THAT DAYTON WAS getting the Stamp Plan, the retail grocer's associations got busy to let the Dayton grocers know about it.

"Get this," a release to the members of one grocer's association read, "It depends upon you how much you will benefit" from the Stamp Plan, but "it should help you plenty. Tell your customers receiving public aid to make application for blue stamps . . . It means 50 percent added business to you and will be appreciated by your customer . . . Let's make this plan work."

A mass meeting explaining the plan for grocers was held. To make sure it would work, the grocers of Dayton, chains and independents alike, took it upon themselves through a committee of their own to police the plan.

The plan is like an honor system. It won't work unless the people involved support it themselves. And it won't work unless people understand it.

So to ward off evasions and to make sure that people would understand the plan, the grocers raised money among themselves to advertise and explain it. This was of course in addition to the individually sponsored advertisements.

The grocers' committee, with chain, independent, and wholesale representatives on it, took over the job of making the plan work.

Only foods and household supplies are sold for orange stamps, and only surplus foods are given in exchange for blue stamps.

SOMETIMES THERE IS A TEMPTATION TO THE person receiving relief to try to get cash for his stamps or to try to buy other things besides food with them. Among families on cash relief, the food allowance per week for a family of 4 persons is only $4.90 in Dayton. Rents are paid only in emergencies. Payments on gas and light are made, but funds for this purpose are low. No relief money at all is allowed for ice, or haircuts, or carfare, toothpaste, razor blades, or for many other indispensable small items or serv-

1

2

ices people need today. Practically the only clothes people on relief get are those made in WPA sewing projects.

Grocers, too, are tempted to get extra business by giving extras on the stamps. But after 2 months of the Stamp Plan, the grocers' committee met to consider its problems, and out of the 550 grocers only two had been reported for stamp violations.

People getting the stamps, too, have played ball. Grocers report that the hardest part of the stamp plan job is to get people to understand they can't get cash for change if their purchases don't come out to an even quarter. But once the Stamp Plan is explained there is no trouble. The Stamp planners take what the grocers call "due bills" for change due them.

INQUIRING BEHIND ITS OWN HEADLINES, A Dayton newspaper printed up some postcard ballots on the Stamp Plan and sent them to food handlers, to business men generally, and to the participants in the Stamp Plan.

This is what the voters in this election thought: Of 115 food handlers who answered the questionnaire, 106 voted a straight ticket in favor of the Plan, 6 voted against it, and 3 just said they didn't know.

Knowing less about the Plan, the business men who weren't food handlers for the most part declined to vote. They did indicate their interest in the Plan, however, by returning the questionnaires. Thus, 139 had no comment, 99 were for the Plan, and 26 said they disapproved.

Among one hundred people who actually tore the stamps out of their stamp books and spent them at their grocery stores, the vote was 88 in favor of the Plan and 12 against it.

This poll, which was taken after the Plan had operated for 1 month, also permitted food handlers to say whether or not it had increased business for them. "It helped," 83 food handlers said; "It doesn't help," 12 said; "We don't know whether it helps or not," 21 said.

One grocer commenting on the poll said, "So far as I am concerned, I have only one customer who brings in stamps. It doesn't help me much directly, but the way I look at it, when you spend that much more money in the town it's bound to help everybody."

TABULATION OF THE POLL RESULTS SHOWED that the direct benefit to a particular grocer depended upon how many customers he had on relief. One grocer said it jumped his business up 50 percent; 2 said it gave them a 33⅓ percent lift; 7 noticed a 20 percent gain; and 13 said it moved up their business from 10 to 15 percent.

People who were polled had ideas of their own to offer on its improvement. Most importantly, they objected to the fact that stamps come only in the 25-cent denomination. "Put the stamps up in denominations of 1 cent, 5 cents, and 10 cents, too," they suggested, "and that will make for less bookkeeping."

Anticipating the decision to include (in Shawnee, Okla.) families receiving less than $19.50 a week, whether they were on relief or not, a grocer in Dayton wanted the Stamp Plan extended to every family in his city earning less than $60 per month.

Many thought that the list of commodities that could be purchased with blue stamps should be lengthened. Almost everyone thought milk should be added; others wanted lard and bacon put on the list; and still others thought that it did not include enough green vegetables. "Why not make the blue stamps good for every fresh vegetable?" someone asked.

Grocers out on the firing lines had their own reports to make. A young clerk said: "When oranges and grapefruit were put on the surplus list, piles of them just melted away like snow in summer. And then at the end of orange and grapefruit season, when they were taken off the list, they just stopped moving altogether." His store, located in a poor community, normally didn't sell these fruits.

"Graham flour doesn't move much," said a white-haired grocer who had been in the same store for 40 years. "That's because people don't know what to do with it. But for things like corn meal and wheat flour, I tell them to take them on their blue stamps. I tell my relief clients to save their money and bake biscuits and corn bread."

FAR AND AWAY THE MOST POPULAR OF ALL blue stamp foods, reports show, are butter and eggs. "I don't suppose," a grocer commented, "that you can ever understand what the blue stamps mean until you have got along without butter and eggs the way these people have done. They buy eggs and butter like I've never seen families buy them before."

It isn't strictly true, however, that the families receiving direct public aid in Dayton had had no butter in years. Surplus commodities have been distributed in Dayton through the Federal Surplus Commodities Corporation since 1933. For the first 6 months of 1939, foods valued at about $15,000 a month retail were distributed free to families receiving public aid. Free

3

1. Stamp planners pay for the food they buy with the blue and orange stamps, just as if they were cash. "We fought hard to get the stamp plan," Dayton's grocers say, "and we are working hard to make it work." Advertising widely the specific foods designated as "surplus," Dayton grocers hope to bring them to the attention of all consumers whether they are Stamp Planners or not.

2. Grocers paste the stamps on cards and spend them with their wholesalers at full face value. If the grocers prefer, they can cash the stamps at a bank or with the Federal Surplus Commodities Corporation office in their city.

3. A wholesaler will cash several thousand dollars' worth of stamps at one time. Altogether $113,000 worth of blue stamps were given away during the first 3 months of the plan in Dayton. This meant Dayton's needy had a purchasing power for specific foods of $113,000 more than they would have had without the stamps.

butter, and beans, flour, oranges and grapefruit, grapefruit juice, raisins, and prunes, for example, moved into the kitchens of the needy. As efficient as this distribution by relief agencies was, people had to stand in line to get their food on the days it was distributed; some had to walk miles (people on relief have no money for carfare) for their commodities and then they had to walk miles home with their arms loaded. They were given food in quantities which were supposed to last them until the next distribution but didn't, because food doesn't keep without ice.

WHILE DAYTON'S NEEDY FAMILIES MINIMIZE the virtues of direct distribution of foods, they vote for the stamps by a landslide. Just why they like the stamps is best told by themselves.

Bob Linton, for example, is waiting now to be called to work at a foundry where he operates a drill press machine which stamps out the heavy steel wheels on which trucks roll along the highways. He and his wife and baby are very much on their own. Not so long ago, Linton thought the whole world had turned against him. His wife had been sick, and even though he was working some agency decided that he couldn't take care of his child. Distracted, he tried to commit suicide. But he got well and so did his wife. They got their child back and now they are on relief temporarily until his job comes through again. He has seniority at the plant and his former foreman assures him he will go to work again soon.

When he first became unemployed about 6 months ago he got unemployment compensation, $8.75 a week. Out of that he had to pay $4 for the room he and his wife and child had. That left $4.75 for food, ice, an occasional pack of cigarettes, and the collection plate at the church he attends.

"Now," he said, "I get a food voucher of $4.20 a week, and on top of that I get $1.50 worth of stamps, $5.70 in all. That still doesn't give us too much. Without the stamps, though, I don't see how we would get along. Even with the stamps we can't get everything. Last night we had beans cooked with bacon, and stewed potatoes," he calls them that, "and tomatoes a neighbor gave me for watching his house when he went out. But if you really want to know what I eat," he says, "just look at the list of surplus foods, eggs, tomatoes, peaches, rice, and cabbage."

He'd like to have a garden so he could work on it, but even more important than a garden is the question of ice. "We keep our milk in the sink and let the water run; but you can't keep milk that way. Put it in the sink in the morning and by noon its sour. The answer to that is money for ice, and the answer to that is a job. The blue stamps are good, but no offense, I'd like a job."

ELIZABETH SLOAN, HER HUSBAND, AND mother had never received direct public aid before the Stamp Plan went into effect. Up until 12 months ago, they had been able to get by without relief or WPA. Elizabeth had worked at a factory, but then they found out she was married and that factory doesn't employ married women. Bill, who played in an orchestra, ran into a spell of bad luck. Eventually Bill was able to get a WPA job, and now the 3 of them are living on $30 a month. Bill takes his lunch to work and in it, thanks to the blue stamps, there is a peach. Dinners are blue stamp specials: Corn bread, made with blue stamp corn meal; blue stamp eggs; tomatoes, also bought with blue stamps; and perhaps tea to drink.

Mrs. Mosher, who receives a $13.30 food order every 2 weeks for herself, her husband, and 4 small children, is helped considerably by an extra allotment of 2 quarts of milk a day. Even with this, meals were pretty badly balanced. She tried everything to vary the diet, but she had to stick to soups and beans; they were cheapest and most filling. Now, with stamps, she can add fruits and vegetables. Not having any money at all in the house worries her, but even in things that might stump another woman she finds ways. For toothpaste, she gives her children salt or soda; they have their choice.

MRS. PERCELL, WHOSE HUSBAND IS AN UNemployed paperhanger, stopped teaching her little girl to play the piano while she talked about the stamps. Even with the stamps, she said, she had to spend more for food than she could get with her $5 worth of orange stamps a week, and $2.50 worth of blue stamps. First of all, the children needed so much milk—3 quarts a day—and she'd like to have cod liver oil for them, they were so pale. But she couldn't afford that. Last winter they got behind on their food and ran up a bill which they are still paying. Of course, they can't pay that off with stamps. The regulations say stamps are only for actual purchases.

Criticisms of the Stamp Plan in Dayton come from some persons on relief. Large families complained that if they had to buy $1 worth of orange stamps a week for every member of their family, just buying stamps would take all their money. Recognizing the justice of this, the plan has been modified so that no family, however large, is required to buy more than $7 worth of orange stamps a week.

When the first list of commodities that could be purchased with blue stamps was announced, oranges and grapefruit were the only fresh fruits on it. There were no fresh vegetables. By August 1, however, this list has been expanded to include pears, peaches, tomatoes, onions, and cabbages.

Despite the enthusiasm of the vast majority of people using the stamps, not all the persons eligible do participate in this plan. There were 4,800 families on direct relief in August, 2 months after the plan had been inaugurated, who were eligible to take part in the plan, but only 3,300 families were actually participating in it.

While 1,100 of the 2,700 persons receiving old age pensions purchased stamps, the majority of the rest are living in boarding houses or institutions and do not purchase food from stores. Of the persons receiving blind pensions, 44 out of 108 eligibles signed up; and of the 290 families receiving mothers' pensions, 238 used blue stamps. There were 3,400 WPA families, and of these, 2,100 took advantage of the stamps. Altogether about 20,000 persons now are getting the benefits of blue stamps, while approximately 30,000 persons could be drawing blue stamp dividends.

COMMENTS HERE AND THERE INDICATE some possible reasons for the failure to participate. A man receiving an old age pension said he had no way to go to the office where the stamps are sold. A few people on WPA say they never heard of the Stamp Plan, but when told about it say they are going to try it. A few families do not like to tie up money in orange stamps in advance, though they can redeem them at the stamp sales office in case of emergency. Some persons have been misinformed about the plan by rumors. "I heard you will be cut off WPA if you take the stamps," one man said. "I heard the people on stamps will be fired first," the second man said.

Gradually, however, even the people who depend on information by word of mouth are coming in. The rumors about the plan now are favorable after 3 months of the plan's operation.

That's the stamp plan in Dayton. The city buys orange stamps from the Federal Government out of a revolving fund, and sells them to people on relief. Along with each dollar's worth of orange stamps, the Federal Government gives the city 50 cents' worth of blue stamps without cost which it, in turn, hands out to its orange stamp customers. Under an agreement with the FSCC, the city also receives free blue stamps to give to families receiving relief in grocery orders in the amount of 50 cents a week for each person in the relief family.

From June 5 to June 30, $36,616 worth of orange stamps were sold, and $33,873 worth of blue stamps were given away.

For the month of July $39,818 worth of orange stamps were sold and $40,197 worth of blue stamps were given away.

August's sales of orange stamps totaled $41,662, and $39,321 worth of blue stamps were given away.

In the 3 months $113,391 worth of additional food purchasing power was pumped into Dayton and circulated through its grocers' tills, its jobbers' account books, through the accounts of railroads, and truckers and out onto farms.

COMPARED WITH THE AVERAGE MONTHLY industrial pay roll of $7,000,000 in Dayton this is not a first payment on a bonanza. But Dayton probably doesn't expect to find a gold mine in the blue stamps. During the worst month of the depression it had 55,000 unemployed. Now it is slowly coming back from those hard days. Many who were hit during the depression are back at work again but there are still 30,000 persons receiving direct public aid who still can't afford all the food they need to stay healthy.

With stamps, Dayton feels insurance can be taken out on better diets. And perhaps through the stamps, Dayton hopes, farmers can be helped to prosper, and finally maybe wages earned in factories will take the place of blue stamps.

NUTRITION experts in the Bureau of Home Economics are making a special study of the differences which the Stamp Plan makes in the diets of Dayton families. "Protective foods" are usually skimped in diets of low-income families. Since many of the foods purchasable with blue stamps are these badly needed foods, the nutritionists want to determine how much diets have now been improved.

●

A MILWAUKEE NEWSPAPER has counted the number of brands under which some commodities are sold in that city.

There were in use there during the year ending January 15, 1939, 127 brands of packaged coffee, 72 brands of packaged tea, 11 coffee substitutes, 39 brands of hot breakfasts foods, 84 cold breakfast foods, 40 kinds of canned milk, 42 brands of canned soup, 184 brands of canned corn, 225 brands of canned peas, 103 brands of canned asparagus, 51 brands of canned beans, 41 different kinds of canned crab meat, 20 brands of canned spiced ham, 22 brands of canned corned beef hash, 102 varieties of tomato juice, 101 assorted brands of bottled catsup, 107 different peanut butters, 136 different brands of macaroni, 130 brands for packaged spaghetti, and 35 brands of fresh fluid milk.

Watch For Apples

With more apples due to come to market this year than last, dividends are in order for consumers who know how to select, store, and use this fruit with "appetite appeal"

GET READY for a lot of apple eating this fall! It looks as if commercial apple production—after a slump last year—is going to break bounds again and go over the 100 million bushel top.

That's the latest bulletin from Government experts who predict that over 102 million bushels of apples for "fresh consumption" will be on hand for apple lovers. This means 20 million more than last year. Only six times in the last 14 years has apple production exceeded this mark, and this year's crop is going to be well over average.

Bargains in consumer prices usually come with abundance in supply. Three years ago, when there were three-quarters as many apples as we're likely to have this winter, consumers paid a penny a pound more for them than they are now paying. The full pressure of this year's big apple crop on prices is expected in October.

What farmers get for filling our apple pies is something else again. Ordinarily their share in consumer apple dollars is about 33 cents. The other 67 cents go to the people who move apples from orchards to consumer orifices. While this *proportion* doesn't change very much, the *actual* cash farmers receive can show big swings up and down.

Three years ago, farmers received $1.05 a bushel for their apples. The next year the price dropped to 67 cents. Last year it had climbed up to 81 cents. It is too early to say what it will average for this year, but just as big supplies press down on consumer prices, they press even harder on producer prices.

Nor does having more apples to sell compensate always for low prices. In 1936–37, when farmers had 75 million bushels to sell for fresh consumption, their total returns from all their crop were $123,000,000. The year before, with a fresh apple crop 37 percent larger, total crop returns were only 2 percent larger. The year after 1936–37, supplies for fresh consumption were 53 percent greater than in that year, while total returns were only up 8 percent.

How big consumer pocketbooks are greatly affects the amount of money that goes into apple growers' pockets. Apple growers depend, for their money, on the pocketbooks of consumers abroad as well as those at home. When foreign markets fall off, these farmers feel it. They notice the difference, too, when there is an abundance of other fruits, particularly citrus fruits, to tempt consumer appetites.

At different times since 1933, the Government has had to come to the help of apple growers staggering under too heavy a load of unsalable apples. It has done this through the Federal Surplus Commodities Corporation. Turning an embarrassment into a blessing, the FSCC has purchased "surplus" apples and routed them into the homes of families too poor to buy.

From 1933 up to July 1, 1938, the Government had bought almost 8½ million bushels of fresh apples, and paid nearly $9,000,000 for them. Dried apples also have been purchased. The total so far has been close to 16 million pounds. Expenditures on this account by the Government came to considerably less, $1,690,000.

Already this year, the FSCC has gone into California to help apple growers there. It has bought over 180 cars of apples. No decision has been made so far as to whether fruit will be purchased in other sections of the country.

"An apple a day keeps the doctor away," goes the old jingle. If true, such a prescription might make everything rosy. Unfortunately, the jingle cannot be taken literally, because not all kinds of illnesses are due to shortcomings of the diet, and besides, no single food meets all the needs of good nutrition. But apples, for several reasons, do their bit toward toning up your diet if you eat enough of them.

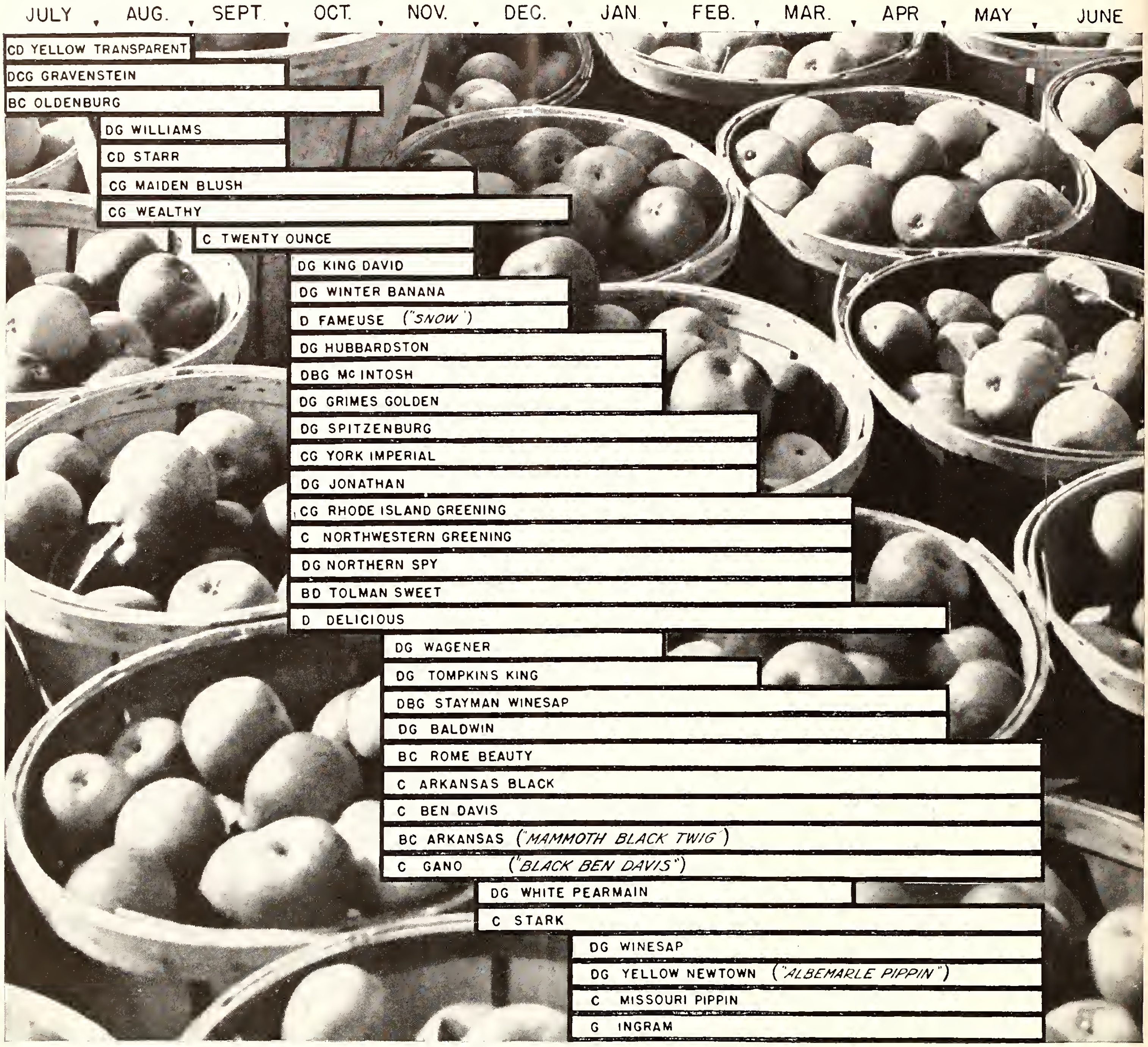
When eaten with their skins, apples have a certain roughage value. For persons in normal health, apples perform the useful job of helping to keep the digestive tract in good order. Other foods, such as baked potatoes eaten with the skins, do this same job, too. And it's worth remembering that a good deal of the mineral content of fruits and vegetables lies near the skin.

Another virtue of apples is that they are suppliers, though modest ones, of Vitamin C. Vitamin C is one vitamin that is not stored in the body. You must have a fresh supply of it every day for full protection. Though apples don't rate as a rich source of this vitamin, here's a fruit that can be found on markets the year-round. Whether you have apples in desserts or salads, or are one of the apple fans who like them raw, you can be sure that the apple-eating habit will add considerably to your supply of Vitamin C 12 months throughout the year. Apples are also fair sources of Vitamins B and G.

A less solemn but equally potent reason, any consumer knows, exists for tucking apples away. Besides food values, apples have a big measure of "appetite appeal," whether they are eaten *au naturel,* or scalloped, baked in their skins, in apple brown betty, in pies, or dumplings, in applesauce or apple butter.

Around the Consumers' Apple Year

When Leading Varieties of Apples Go To Market in Largest Quantities



D MEANS "DESSERT" OR "EATING" APPLES
C MEANS SUITABLE FOR COOKING
B STANDS FOR BAKING POSSIBILITIES
G STANDS FOR GENERAL PURPOSES

Getting your money's worth in apples is first a matter of selecting the right apples for the right purpose. Some are tops for dessert or eating apples. Some are better for cooking. Others are especially good for baking. Know the purpose you want to put them to before you go shopping for these beguiling balls of flavor.

To help you choose wisely, we have marked the special use values of 37 different varieties on the chart appearing above. There's nothing hard and fast in this designation. It is based on a consensus of expert opinion, but individual consumers may find their own experience justifies revising our classification.

On no one day in the year can a consumer walk into a store and find all these varieties on display. They come to market at different times in the year. The smart thing is to pick your favorite among the kinds that are most plentiful each month. The chart on this page will guide you to months of abundance of each of 37 types.

Buying in quantity can also result in savings. But before you decide to go into the wholesale market, be sure you are wise in the ways of storing apples. You will need a cool basement with a good circulation of air through it. Choose a dark spot away from exposure to sunlight for storing. The cooler the storage space, the better, so long as it doesn't get below 32° F. Apples keep their crisp quality much longer in a cold-storage space. If the room is allowed to get warm, the apples will soon take on a mealy ripeness.

If you are an apartment dweller or don't have facilities for storing, buy in quantity only if you are able to divide up your apples with neighbors or friends. Apples kept for any length of time under improper storage conditions will soon lose their taste and will rot.

Definite savings are to be had by buying apples in quantity. Compare the price of a bushel of apples, which weighs about 48 pounds, with what you would have to pay if you purchased the fruit pound-by-pound. Do the same for a box of apples, which weighs about 44 pounds, or a barrel, holding 140 pounds of apples. With a cool storage space, average-sized families can use at least a bushel or a box of apples without fear of wastage.

STANDARDIZED CONTAINERS OF APPLES ARE so far a half-way accomplishment. While growers in the Northwest use them, growers in the East don't. Some attempts have been made to standardize the size of containers for apples in the East, and many growers do use a standard-sized box. But there is still a confusion of box sizes on the market.

Most containers have marked on them the size or number of apples packed in them. Apples packed 88 to 96 in a standard box are very large, and a good size for baking. Medium-sized apples, best for most families, are packed 113–138 in a box, and are 2½ to 2¾ inches in diameter. Size has very little to do with apple quality.

Apple grades are not standard throughout the country. There are both Federal and State grades. Growers in the Northwest usually use their own State grades, which are often compulsory. Growers in the East use the Federal grades, which are voluntary. State grades vary with the individual State.

If the container has "U. S. Fancy" stamped on it, the apples are top-notch, fully ripe, tasty, good size, good color, and unbruised. "U. S. No. 1" are apples just a shade lower in quality than "U. S. Fancy." Next come "U. S. Commercial," which must be every bit as good as U. S. No. 1, with the exception that color of the skin is not considered in grading the fruit. "U. S. No. 1 Early" are immature apples, lower in cost, and the kind consumers should ask for when they plan to use the fruit for cooking. "U. S. Utility" are apples packed late in the season, usually have blemishes, imperfect color, and are not well-shaped. Definitely second-grade, they can be money savers if you are willing to pass up color and high flavor. "U. S. Utility Early" have the same requirements as "U. S. Utility," except that they are immature and are primarily intended for cooking. If you should find a box marked "U. S. Hail Grade," you will know that you are buying a fruit that has gone through a hail storm and is bruised.

Most apple buying is done by the pound, and not from the original containers bearing the grade mark. That means consumers don't see the grades, so they must rely on their knowledge of a good apple when they see one.

Getting flavorful apples—which, after all, is what most consumers are after when they buy this fruit for eating—means spotting the apple that is fully ripe, firm, and without defects. Flavor also depends to a certain extent on the variety of the apple. Immature apples are good for cooking, but not if you want good flavor in an eating apple. You can tell an immature apple by its poor color. If unripe apples are stored for any length of time, they may soon look shriveled.

At the other end of the apple scale is the overripe apple. These "give" when pressed, have soft, mealy flesh, and lack the snap and crispness that characterize a good eating apple.

Apples on the market from December through the winter and spring may develop "scald" or brown spots caused by gases given off during storage or while the apples are in transport. Such brown spots are danger signs, meaning poor quality. Apples packed individually in oiled paper, or surrounded with shredded oil paper packing, run less risk of "scalding."

Apples with mealy or brown flesh mean wastage. You can't always tell from the outside of the apple whether this is true, but those that feel soft or bruised should be blackballed. As the apple season moves into the winter months, this defect becomes more common on account of incorrect storage.

Apples that have been frozen or bruised soon turn brown, become watersoaked and their skins take on a leathery look. A mild freeze may not injure the apple's eating quality, but it will damage its keeping quality.

VERSATILE AS ANY FRUIT FOR MAKING TANTALIZING dishes are apples. Anyone who can't think of the many ways to use apples may want to get a copy of "Apple Recipes," a booklet prepared by the Bureau of Home Economics in conjunction with the Division of Marketing and Marketing Agreements of the Agricultural Adjustment Administration. The booklet has a collection of some 30 different recipes that can be used in serving apples. The recipes tell how to use apples by themselves, with meats, with vegetables, in salads, in pastry, in cake and candy, and, finally, in desserts. The bulletin is free. Simply write the Bureau of Home Economics, Department of Agriculture, Washington, D. C., for a copy.

FARMERS' share in consumer apple dollars seldom amounts to more than one-third, except in years of high prices. Even then, farmers have received less than 40 cents out of each consumer dollar. For this return, farmers grow, pick, pack, and move apples on their first lap to market.

Modernizing Weights and Measures Laws

New York State brings its laws up to date to provide more efficient protection for consumers and honest merchants

BEFORE NEW YORK'S legislators packed up their portfolios to go home this summer, they did some streamlining of weights and measures laws that puts New York State in the front rank of States that have regard for consumer pocketbooks.

Taking its cue from suggestions offered by the State Weights and Measures Bureau, the legislature went through bill after bill until it finished the job of putting teeth into already existing weights and measures laws, and of adding new laws necessary for protection of both consumers and honest merchants.

"The amount of legislation is so considerable—it equaled both in amount and importance, all the legislation that was enacted in the last quarter of a century," is the way the Director of the New York Bureau sizes up his new set of working orders.

ALREADY THE WORD HAS GONE OUT TO local and county Weights and Measures officials to brush up on the legislation. Not a day is being lost in putting into action new machinery to replace the rusty and sometimes obsolete weights and measures statutes that had had no major changes for 25 years.

For consumers in other States who want a telescoped view of New York's new weights and measures laws, we give a digest of them here. More legislative-minded consumers who may want to see similar bills introduced in their States should write the Director of the State Weights and Measures Bureau, Albany, New York, for copies of the new laws.

Ice cream, all types of ices, sherbets, and other frozen desserts, sold in quantities of a half-pint or over, must henceforth be packed in containers of "multiples of the half-pint" only, the New York Legislature decided. Banned are misleading or odd-sized containers holding a half-pint or more; smaller sizes, though permitted, must be marked as to net contents in terms of fluid ounces. And to put punch into the regulation, the lawmakers decreed that the net contents marking must be placed on the side or top "in a plain and conspicuous manner." Only exception to this is that frozen desserts prepared as party favors or in "fancy form" can be sold as "units" of less than 8 fluid ounces, and though the net contents need not be printed on the container, the number of units, if over 6 in count, must be marked on the carton.

ICE CREAM COMES IN FOR MORE ATTENTION under the new law. Realizing that a good part of the consumer's ice cream dollar goes for air, the legislators voted to make the minimum weight of a gallon of ice cream sold in New York, 4½ pounds. In addition, the act requires that the weight of ice cream pints and quarts must be in proportion to this minimum. Now a pint of ice cream must weigh at least 9 ounces, and a quart 18 ounces, in the Empire State.

Consumers who buy large quantities of apples, potatoes, and other fruits and vegetables usually find them sold either in bushel, box, or barrel. Because different fruits and vegetables weigh different amounts, a bushel of one kind may contain many more pounds than a bushel of another kind. To standardize selling practices, New York says henceforth all fruits, vegetables, grains, and nuts, must be sold by weight or numerical count. So voted the legislature, in giving statutory recognition to one of the primary rules of careful buying: Buy by weight or by numerical count. Exempted from this requirement are prepackaged foods classified as "original containers," which, nevertheless, must be correctly labeled in terms of "net weight, standard measure, or numerical count."

IMPROVING ON THIS LEGISLATIVE EDICT, THE Weights and Measures Bureau issued a decision that should go far toward protecting consumers who are given short weight or measure when the contents of packaged foods shrink because of evaporation and other causes. The Bureau ruled that a manufacturer or producer who sells a package marked "1 lb." must put enough of the commodity in the package at the time of packing to insure the consumer's receiving "one pound within a tolerance above or below the indicated one-pound marking." This means that a manufacturer who knows, for example, that his commodity will normally shrink 1½ ounces by the time the package reaches the consumer is required to put into the container ¾ ounce more than a pound of the commodity. Then the consumer is assured of receiving anywhere from 15¼ ounces to 16¾ ounces of the commodity, or an average of 16 ounces for each pound.

Acting on the suggestion of producers and State officials alike, the legislators standardized the containers for "beer, ale, porter, and other maltous beverages" so that now these will come to retailers in quantities of a barrel, half-barrel, quarter-barrel, and one-eighth barrel. No "in-between" sized containers are allowed. This law also established 31 gallons to the barrel, thus settling a long-disputed question. Any of these beverages sold in less than eighth-barrel quantities must have the net contents marked plainly on the outside of the container.

WEIGHTS AND MEASURES OFFICIALS ARE NOW given, by statute, the powers of peace officers when performing their duties. Further, it is left entirely up to the officials as to whether a violator be prosecuted. The weights and measures officer has the choice between ordering a law-breaking scale repaired, or bringing the violator before a court of justice. In addition, weights and measures officials in New York now do not have to prove that anyone accused of breaking weights and measures laws did so knowingly.

Scales, pumps, and other measuring and weighing devices found to be false will henceforth be marked with a "condemning tag" in New York. Continued use of the scale or pump tagged in this way will bring the owner face to face with the law. New York consumers can expect to find either a tag of approval on scales, weighing and measuring devices, and particularly on gaso-

[*Concluded on page 15*]

OUNCES AND INCHES

We'll Have Enough Food Next Year

Even with more of some foods going abroad, experts figure that American farms and ranches will be producing enough and to spare of all foods for American dinner tables.

HOUSEWIVES have little reason to fear that food supplies this season will be less plentiful than they have been in recent years. Estimates just completed by the Bureau of Agricultural Economics experts reveal that supplies of most foods for next year (statistically, the year which began July 1, 1939) will be equal to, or larger than, supplies during the past 3 years. In some cases they will also exceed the average level of 1925–29.

The Bureau experts were unable to find any food of which a shortage is in prospect. They did find that for several foods supplies will be considerably above our usual requirements.

Good general picture of the supply situation given by this survey can be obtained by comparing (1) the amount per capita of each food that the experts believe we will have available for human consumption either here or abroad, and (2) the amount of each food which the statistical "average American" has used in previous years. These figures, given in the table below, indicate that supplies available for both exports and domestic consumption this year will be:

Considerably above average (1925–29) *and above at least 2 of the last 3 years for lard and other domestic edible fats (except butter), wheat, rice, sweetpotatoes, and fresh, dried, and canned fruits.*

Considerably above average but below at least 2 of the last 3 years for fresh and canned vegetables, and milk and manufactured dairy products (except butter).

Slightly below average but above at least 2 of the last 3 years for meats, poultry, eggs, and butter.

Below average and below at least 2 of the last 3 years for potatoes and dried beans.

FOOD SUPPLIES—PAST AND PRESENT

Commodity	We had this much to eat per person*				For the present year (1939–40) this is the estimated supply for consumption here and for export	And this much per person is expected to be available for consumption here
	In the average year from 1925 through 1929	In 1936–37	In 1937–38	In 1938–39		
	Pounds	*Pounds*	*Pounds*	*Pounds*	*Pounds*	*Pounds*
Meats	135.8	127.0	123.8	125.4	131.7	130.8
Poultry	19.8	18.4	17.4	17.8	19.0	19.0
Eggs	40.8	36.2	39.0	37.8	38.2	38.2
Dairy products (except butter)	438.4	455.8	458.3	455.2	443.6	433.8
Butter	17.3	16.6	16.6	17.4	16.9	16.9
Lard	13.8	10.9	11.1	12.2	16.5	13.8
Domestic edible fats and oils (except lard and butter)	15.8	17.0	20.4	16.9	20.4	19.3
Wheat	254.0	235.6	230.6	230.7	310.8	231.0
Rice	6.9	8.5	7.6	8.5	10.4	8.5
Fresh fruit	116.1	110.5	146.3	130.2	159.6	148.6
Canned fruit	13.0	20.8	19.8	20.2	21.9	20.3
Dried fruit	5.3	5.1	5.7	5.4	10.6	5.9
Fresh vegetables	85.0	92.3	95.2	97.2	94.7	94.7
Canned vegetables	18.8	23.2	25.6	23.0	22.6	22.6
Potatoes	148.2	130.4	154.4	142.2	135.3	135.3
Sweetpotatoes	23.4	22.4	26.2	26.3	26.5	26.5
Dried beans	10.1	10.1	9.5	10.1	9.0	9.0

*Includes foods wasted on the way from farm to consumer.

American markets probably won't see all this excess of supply over domestic requirements because some of our food will be shipped abroad. The amount of each food that the experts figure will be available for domestic use is given in the last column of the table.

How much we will export can't be determined accurately in advance because the amount will depend not only on foreign demand but also on the adequacy of shipping facilities, the increase in shipping rates, and a host of other factors. Export experience during the World War can't be relied upon too heavily—partly because of changes in consumption habits and supply conditions since then, and also because this time the belligerent nations are reported to have stocked up on essentials.

Ordinarily we would expect our wheat exports to increase, but with the world wheat supplies on July 1 the largest on record, it does not seem likely that there will be any immediate marked increase. Some jump in lard and pork exports is expected, but there is a general feeling that it won't be great immediately. We ordinarily export only a negligible part of our production of poultry, eggs, beef, lamb, dairy products, fresh and canned vegetables, potatoes, and sweetpotatoes, and there is little indication that war demands will change this condition materially this year. It also seems likely that not much change will occur in exports of dried, canned, and fresh fruits considered as a unit. Thus it looks now as if only for a few commodities are increased exports likely to reduce the amounts available for American use.

But even after probable exports are deducted from total supplies available for use here and abroad, supplies of most foods still appear to be more plentiful than the amounts used here in recent years or in "average years." The general picture given above is altered only by the slight reductions which exports will make in the increases over previous years.

Prospects for each of the individual foods are discussed below. Estimates of supply are based in part on what experts figured production this year would be on the basis of August 1 conditions.

Since August 1, crop conditions have improved. It appears that for some items—notably potatoes and dried beans—supplies may be even higher than the experts calculated.

The consumption figures for past years refer to the amounts available for consumption rather than the amounts actually eaten, since they include amounts wasted from the farm to the consumer.

Meat

More meat than in any year since 1934 is in prospect for 1939–40. After being reduced by droughts in 1934 and 1936, supplies have moved up during the last 3 years and are back to about the average levels which prevailed from 1928 to 1932.

Most of the increase in supply for the coming season is in pork. Beef will be at least as plentiful as in the season just ended. There may even be more beef on hand, if the increased supplies of better grade beef more than offset the prospective reduction in lower grade beef. As for lamb, little change from the 1938–39 level is expected.

The total amount of pork, beef, veal, and lamb available for consumption and export is expected to be about one billion pounds more than the 16½ billion pounds that Americans consumed last year.

Exports of pork products will utilize some of this larger meat supply. But there is little prospect now that export requirements will reduce supplies below last year's level, and consequently housewives may expect more meat.

Sugar

Ample supplies above domestic requirements of recent years are in prospect. On September 11, 1939, all limits on the amount of sugar that could be marketed in this country were suspended by direction of the President. As a result, sugar-producing areas that sell in this country, most of which have relatively large stocks at present, will be able to market more here than they have in any recent year.

Under the quota system, now suspended, the Secretary of Agriculture has annually since 1933 fixed the total sugar marketings required to meet consumers' needs. In practically every one of these years supplies in most producing areas selling in the American market have been larger than their quotas.

Removal of the quotas means that these areas will be permitted to market here as much of their reserve stocks of sugar as they desire in addition to what they ordinarily would have marketed under the quota system.

Poultry

Nearly 200 million pounds (8 percent) more poultry meat than last year are looked for. That also represents an increase of about 8 percent over poultry supplies for the 2 preceding years. The supply available for consumption is at least 160 million pounds more than the amounts Americans have eaten in each of the past 3 years.

Eggs

Larger laying flocks and prospective high egg production per hen indicate that nearly 800 million (2 percent) more eggs than last year may be available, and that supplies will be above the levels of the past 3 years. Prospective supplies for consumption are only slightly larger than the number of eggs consumed in 1937–38, but would be from 1 to 3½ billion more eggs than were used in the other 2 out of the past 3 years.

Dairy Products (Except Butter)

Housewives probably won't find milk, cream, and manufactured dairy products (except butter) as plentiful as they were during the past 3 years, when milk production reached record levels. But the amounts available for domestic consumption during 1939–40 are expected to be only 3 percent less than the amount used in each of the past 3 years.

Butter

Large supplies of the season just ended probably will not be equaled this season, but butter will be more plentiful than in other recent years. Thus, while supplies available for consumption will not be large enough to give every family as much butter as they had last year, there will be at least 100 million pounds more butter than we actually used in 1936–37 and 1937–38.

Lard

Upward trend in hog production has pushed lard production up steadily, and an increase of almost 20 percent in total supplies over last year looms for 1939–40. Prospective supplies available for consumption and exports are at least 600 million pounds more than American housewives used during each of the past 3 years, and well above the amounts used in the predrought years of heavy hog production.

Exports will remove part of this excess of supply over past consumption requirements. But even if we allow for a marked increase in exports over recent years, it seems likely that supplies will be larger than last year, when lard consumption was at its highest point in recent years.

Domestic Edible Fats and Oils (Other than Butter and Lard)

Supplies probably won't quite equal the big amounts we had 2 years ago, but they will be slightly (4 percent) more than last year and above other recent years. During recent years we have imported food fats and oils, partly to fill the gap caused by low lard production. But with current large supplies it appears that the United States again will be exporting food fats. After eliminating probable exports it seems that supplies will be more than what we required during 2 out of the last 3 years.

Increases in supplies of both lard and other domestic edible fats more than offset the decreases in prospect for butter. This year total supplies of all fats appear to be above average and more plentiful than in recent years.

Wheat

Supplies appear to be fully large enough to take care of domestic needs and export probabilities and still provide a substantial carryover at the end of the year. They are about a tenth smaller than last year's high level, but otherwise bigger than we have had since 1932.

The amount of wheat consumed by Americans has varied little in the past 3 years, but has been substantially below the amount used in the 20's because of diet changes.

Supplies available for consumption and export are expected to be about 180 million bushels above the amount consumed during each of the last 3 years. Since world supplies of wheat this season are at a record high, there is small probability of an increase in American exports large enough to take supplies below recent consumption requirements.

Rice

Supplies available for domestic consumption and exports are expected to be considerably above the amounts used here in recent years. Deduction of probable exports from this supply estimate leaves us with about the same amount of rice that we consumed last year or 3 years ago, and more rice than we have required in most other years.

Fresh Vegetables

Although supplies probably will be a little (5 percent) smaller than last year's record production, they will be larger than in any other recent year. Part of last year's large production went unharvested and did not move to market. As a result prospective supplies are only a little below last year's consumption. Supplies will be at least 120,000 tons (2 percent) bigger than the amount of vegetables that moved to market in 1936–37 and 1937–38.

Sweetpotatoes

Third largest supply on record is anticipated, even though supplies are only slightly (3 percent) larger than last year. Use of sweetpotatoes by Americans during the past 3 years has been from 55 to 632 million pounds smaller than the prospective amount available for human consumption this year.

Potatoes

Supplies are expected to be slightly (4 percent) smaller than last year, when they were at about the average level for the past 10 years. The reduction does not indicate any acute shortage. In 6 of the last 15 years we have had fewer potatoes than we are likely to have for 1939–40. In terms of the amount available per person, supplies are expected to be 7 pounds less for the whole year than the average amount of potatoes available last year. But, as compared with 3 years ago, there will be 5 pounds more of potatoes per person.

Canned Vegetables

While supplies will be much (12 and 15 percent) below the relatively high levels of the past 2 years, they still are expected to be more plentiful than in any other year.

Consumption of canned vegetables has jumped to relatively high levels during the past 2 years, but increases in the supply have been even greater. Consequently supplies this season will be just about the same as the amount used last year, and more than we consumed in most every other year except 1937–38.

Fresh Fruits

Supplies not only are expected to be about a tenth larger than last year but they probably won't differ much from 2 years ago, when a new high point in production was reached. Consumers will find fewer pears, grapes, and citrus fruits in markets than last year. But this reduction will be more than offset by larger amounts of apricots, cherries, peaches, cranberries, fresh plums and prunes, and apples already marketed or to be marketed this season.

Compared with the amount of fruit used in this country during the past 3 years, prospective supplies available for consumption and export are 1 to 3½ million tons larger. Exports are expected to cancel only part of this excess above domestic requirements, because countries at war generally look upon fresh fruits as luxuries.

Canned Fruits and Fruit Juices

The amount available for domestic consumption and export appears to be considerably larger (10 percent) than average consumption the last 3 years.

Unless there is an unusual increase in exports, which does not appear probable at present, supplies will be more plentiful than domestic requirements in each of the last 3 years.

Dried Fruits

Piling up of carryovers in recent years has pushed supplies up to unusually high levels. This season the supplies probably will be slightly larger (3 percent) than last year, and almost double the amount that found its way onto American tables in each of the past 3 years. Only part of this excess of supplies is likely to be taken care of by exports.

Dried Beans

Primarily due to a marked drop in production, supplies are expected to be almost 15 percent less than the record totals of the past 2 years. Although we will have less dried beans available than we consumed in each of the past 2 years, supplies still may be above the amounts we have used in other recent years.

Supplies for 1940–41

What the supply situation will be for the year beginning July 1, 1940, still remains problematical because farmers have not planted many of the crops for that year.

Barring another drought, however, consumers need have little fear of any prospective food shortage.

Under the "ever-normal-granary" principle of the farm program, reserve supplies of corn and wheat already have been set up to provide for emergencies. The establishment of acreage allotments, coupled with county planning under the farm program, permits sufficient coordination of scattered farm activities to provide for production of ample supplies of all foods, in place of surpluses of some items and shortages of other items which generally result from uncoordinated action.

No change in the farm program for 1940 is contemplated at present because of the ample supplies available. Should any need for larger supplies arise, consumers may feel assured that the machinery to provide for such supplies exists.

Modernizing Weights and Measures

[*Concluded from page 12*]

line pumps—or else a condemnation tag forbidding their use.

Inspection of all scales used by peddlers in New York State in the future must now take place twice a year, rather than once a year as in the past.

New York consumers have been buying a lot of their milk in cardboard containers the past few years. Taking note of this trend, the legislators brought the law standardizing the size of milk containers up to date. Now provisions of the law which standardize the sizes cover cardboard and all other types of containers for milk.

It shall be a misdemeanor in New York State, the legislators said, for any type of thread to be sold without proper labeling telling either its length in yards or its weight. If its weight is less than 2 ounces, then the label must tell the length of the thread in yards.

Finally, buried deep in the statutes, but of importance to consumers, is the law giving the Commissioner of Agriculture and Markets power to prescribe how products in bulk or in packages—with the exception of butter, meat and meat products—must be sold. (These 3 foods must be sold by net weight only.) This means that he now can rule that a particular commodity must be sold according to weight, numerical count, or standard measure, whichever he thinks best. This law may well be a trail-blazer in regulating the sale of commodities so that consumers may know the exact quantity they are getting for each penny spent.

●

STATISTICS are news in business—including cooperative business. Canada's Bureau of Statistics has recently reported on the extent of the cooperative movement among the Dominion's farmers.

In 1937 there were some 397,000 farm families holding shares and financially interested in cooperatives marketing Canadian farmers' products and purchasing supplies for them. Patrons were listed at a somewhat higher figure—451,000. Total assets for these co-ops came to 88 million dollars. Of this total, members' investments amounted to over 51 million dollars.

IN THIS ISSUE

OCTOBER 1, 1939 ● VOLUME VI, NUMBER 8

Dayton Works Out Wrinkles in the Food Stamp Plan 3
Watch for Apples 9
Modernizing Weights and Measures Laws 12
We'll Have Enough Food Next Year . 13

U. S. GOVERNMENT PRINTING OFFICE 176805

5

LIBRARY
RECEIVED
JAN 8 - 1945
U. S. DEPT. OF AGRICULTURE

CONSUMERS' GUIDE

OCTOBER 15, 1939

MILK

FOOD PRICES

SCHOOL LUNCHES

CREDIT UNIONS

CONSUMERS' GUIDE

OCT. 15, 1939 VOLUME VI, NUMBER 9

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

SEPTEMBER'S flurry of rising food prices which followed on the outbreak of the War in Europe did not catch the New York City Department of Markets off base.

This agency, which includes New York City's Weights and Measures Bureau and a Consumer Bureau which is on the air every morning and in the newspapers every week with fresh, ready-to-use consumer information, patrols the marketing of foodstuffs for New York's 6 million or so consumers.

Naturally enough when fear of rising food prices darkened consumer horizons, consumers got on their telephones, or took their pens in hand, to write to this department for help.

But even before the mail started to pour in, and the telephone bells started jingling, the machinery of the Division of Markets had swung into action.

First of all, the department maintains a price reporting service. Each day it collects information on prices and supplies of foods in New York's markets. With this information before them, officials of the Division know what prices are doing as soon as consumers.

Information on supplies of perishable foods is collected directly from the wholesale markets early in the morning. By 7 o'clock, it is compiled into a report ready for the Director of the Department's Bureau of Consumers' Service to make a 5-minute broadcast, telling housewives just what is plentiful, seasonable, and reasonable in the markets, whether it is fish, fruit, or fowl.

Cautiously, the Bureau does not try to broadcast on the air information on retail prices. These prices vary by neighborhoods, by type of store, by quality or grade of product. A bunch of figures would make hard listening, too. News about supplies, however, is of immediate practical use, because the foods in wholesale markets in the early morning are the foods that appear a few hours later in neighborhood grocery, meat, and fish stores. The Bureau's broadcast is timed to give a busy housewife just the round-up she needs before she goes out to buy.

Price information is collected, however, and released twice a day to the city newspapers. Once a week, too, a special story is written for the papers on highlights in food markets for the week. Sometimes when there is an especially big—and cheap—supply of some food, to help move it along and attract attention to it, the Bureau will issue recipes.

The idea behind the daily radio broadcasts and news releases is the conviction that buying information for housewives must be timely and local. With thousands of tons of perishable foods moving into New York City each day, reports from the Federal Department of Agriculture are not enough of a guide for housewives. Gluts and shortages due to local market conditions arise frequently and only local observers can pick up and report to housewives news about them in time to do consumers any good.

When prices began jitterbugging in September, this service acquired extra value. It was able to give consumers quick information on the actual situation in the market, and to reassure them about supplies.

To supplement this service, the Department of Markets also hastily formed an emergency council, representing all sections of the food trade. This council does a two-way job: It supplies the Department with additional information about conditions in the trade, and helps to keep in line merchants whose prices may get the jumps.

Egg prices were the first to be cracked down by the Department, with the help of the council. Information coming in through the council revealed one morning that the prices consumers were being charged for eggs were out of line with the prices retailers were paying. Promptly the Department of Markets notified consumers by newspaper and radio of the unreasonable spread. The result showed up the next day. Eggs dropped in retail price from 47 cents a dozen to 45 and then to 43 cents.

Maybe other cities have a quick-acting, trouble-shooting Department of Markets like New York's. We'd like to know about them. This kind of service lends a hand not only to consumers but to firms which want to play fair in emergency situations, and to farmers whose pocketbooks suffer when too abundant foods choke distribution channels and when too high prices block consumer purchases.

●

WE CAME A CROPPER on a statement of fact in our article, "A Quiz on Ice Cream," which appeared in the June 1939 issue. First we apologize to our readers whom we unintentionally misled, and, second, to the beet growers and sugar distributors who tell us the error, unless corrected, may work an injury to them.

Our error was in implying that the Federal Government's buying specification for ice cream calls only for cane sugar, and in stating "the insistence on cane sugar is aimed at the possible substitution of other kinds of sugar for cane."

The correct statement is that the specification effective as of the date when the article was published calls for 14 percent of "sugar solids (sucrose)" and no mention is made of cane sugar. This Federal specification has since been revised, and the revision is shortly to be officially promulgated. In its revised form, the specification for ice creams will merely call for a certain percentage of "sugar"; and in the case of sherbets and ices, for "sucrose and/or other approved edible sugars."

Of course, we should have known that both beet and cane sugar are sucrose. As one well recognized authority states. "Cane and beet sugar are chemically identical except for traces of impurities . . . in both cases the impurities amount to a small fraction of one percent." He goes on to state, "When both cane and beet sugar are properly refined, there is no need for any distinction."

Neither in practice nor in specification does the Federal Government insist on the use of cane sugar in ice creams sold to it.

Being human, we have no claim to infallibility, but we do make strenuous efforts to check and counter-check the accuracy of statements appearing in the *Consumers' Guide* in advance of publication. When unintentional errors of fact creep in, the remedy is to make frank admission. This we do now. If you have retained your copy of the ice-cream article, may we suggest that you turn to page 11 of the June 1939 issue, and correct the third and fourth lines of the third column to read: "12 percent butterfat, at least 14 percent of sucrose, and not more than one-." Also, revise the second paragraph in that column to read: "Sugars which are less sweet than sucrose obviously must be used in larger amounts, and ice cream made from such sugars must be kept at lower temperatures."

Building Shelter and Larders For Wildlife

AAA helps farmers to plan land conservation that will also conserve and increase the country's bird and game population

ONE HUNDRED and four years ago President Andrew Jackson looked forth upon the bounty of the land and saw there a future of plenty for the Nation. To give thanks for that blessing, he issued a proclamation to the people.

It was Thanksgiving Day in 1835, and President Jackson wrote: "We thank Thee for the bountiful supply of wildlife with which Thou hast blessed our land; for the turkeys that gobble in our forests; the flocks of geese and ducks that honk on our streams and lakes; the clouds of carrier pigeons that darken the skies; and the vast herds of deer, antelopes, and buffaloes that roam the boundless plains beyond the Blue Ridge Mountains."

President Jackson had little reason to think it necessary then, but he might have added a word about conservation.

A century later there was no longer a "bountiful supply of wildlife" in the Nation. Instead our wildlife population was rapidly decreasing, in some instances almost to the point of extinction. Reason for the decrease had not alone to do with careless hunters or the displacement of the wilderness by city and farm. Equally important was the failure of the country's citizens to plan a long-range program of land and wildlife conservation.

TODAY THERE IS SUCH A PLAN. IT MEANS conservation not only of the land, but also of the things that live on the land. Preservation of our wildlife is an integral part of that program, for the food and shelter which wildlife need are assured when land is cherished.

Preventing misuse of the land is one of the basic problems which farmers, helped by the Agricultural Adjustment Administration, are coping with today. Millions of farm acres made worthless in the past half-century by overworking the soil, or by failure to take measures that would prevent soil destruction by water and wind, are being given new care.

When land goes, the things that live from the land move on or disappear. Men move to new soil until there are no new unspoiled acres to till. When that point is reached, as it has been in this country, stern measures must be taken to reclaim wasted acres, and to stop further soil exhaustion. Wildlife must depend on humans to save the sources of its

food and shelter. When humans fail in their job birds and game disappear.

Even before soil-conserving farm programs came into being, people began to busy themselves over solving the problem of our shrinking wildlife population. A quarter of a century ago the Bureau of Biological Survey started acquiring and developing tracts of land for the preservation and increase of wildlife and furred animals. It now operates almost 12 million acres as refuges for wildlife and in addition has set aside nearly 4,000,000 acres of land for waterfowl. Migratory birds—those that move from northern breeding grounds to winter in the South each year—have 200 stop-off stations scattered throughout the country where they may be assured of food, shelter, and safety under the protection of the Government reservation. In the West, big game—antelope, mountain sheep, buffaloes—all have large areas reserved as sanctuaries for their protection.

Other agencies have worked with the Bureau of Biological Survey on this job of building up the wildlife population. State conservation areas, national forests, national parks, and special grazing areas are maintained by the Federal and State Governments for the protection of wild animals. Together these are able to take care of a sizable percentage of all wildlife in the country.

But more than half of the game and wildlife in the United States depends on privately owned land for its sustenance and refuge. Something like 80 percent of game which sportsmen take is brought down on land owned by farmers. Two decades ago, farmers and wildlife lovers began to notice a gradual decline in the number of untamed animals subsisting on farm lands. Flocks of waterfowl became smaller, and few and far between. There were not so many quail and grouse in the brush. The prairie chicken—which once literally swarmed over the range lands—was near extinction. Small furred animals were not so numerous and the larger ones—like deer and elk—were driven into populated areas in search of food. Even fish became less plentiful in the streams.

Experts did not have to count wildlife noses to confirm their observations. No animal census was necessary. Sportsmen's clubs, nature lovers, and the farmers themselves, all reported a precipitate fall in the number of wildlife in America. One expert has estimated that there are "36,000 individual clubs, with a membership of over 11,000,000 people who are interested in wildlife conservation."

Drastic measures have been taken since the early 20's to curb hunters and devotees of the Waltonian sport. By protecting wildlife in breeding seasons and by restricting the number of game that may legally be taken by hunters, wildlife conservationists saw some hope for putting a stop to the loss of living things on the land. These measures helped only slightly, however.

Conservationists soon realized that losses in wildlife went along with wastage of land. To conserve wildlife, they said, we must preserve the soil which supports it. That meant conservation of agricultural lands.

•

Today on a vast stage of more than 50 million acres there operates a program of conservation and improvement of the land. On those 50 million acres a new kind of reconstruction of the land is taking place, a change that may some day justify another Thanksgiving proclamation such as Andrew Jackson's.

Conservation of farm lands is still in its infancy stage. Here and there throughout the country once naked hillsides are now blanketed by green grass. On over-cropped and burnt-over woodlands, clumps of young saplings stand where 10 years hence there will be densely wooded areas. Dried-up lakes and ponds are once more filling with water. Pastures are being reseeded with crops that protect and enrich the soil. Millions of farmers each year now are holding their soil more surely with strip-cropping, contour planting, and terracing.

Even when windbreaks are built, brush patches planted, and fields of grasses are in full bloom, the return of wildlife to the land is a slow, gradual process. Slow as it is, wildlife rehabilitation is becoming a fact.

Trees grown as a barrier to protect the land against wind and storm provide shelter for rabbits, squirrels, 'possums, and larger game. Reforested areas bordered with brush and shrubs provide nesting places for birds. Fields planted with legumes or lespedeza furnish food for wildlife. Rebuilt ponds and streams lure waterfowl. The farmer, by following these land-conservation practices, is making a beginning toward creating refuge and safety for wildlife on the land.

Until now, the small gains in conserving wildlife have been a result unplanned for but anticipated under the program of land conservation. Food and shelter for wildlife have been a byproduct of the whole conservation program, but a welcome one to the wildlife lovers who fear the numbers of birds and game will shrink to the point of extinction with the loss of large areas of the country's agricultural lands. But as a conscious plan for wildlife conservation, it has had until now some definite shortcomings.

In some areas the loss of wildlife has been more severe than in others. Here, conservationists realize, the problem of rebuilding the bird and game population is not simply a matter of planting windbreaks, soil conservation crops, and the rest. What is equally important is planting trees, shrubs, and grasses that provide the right kinds of food and shelter.

ONE WAY to make waterfowl population grow, is to develop water resources on agricultural lands. When a farmer refills a dried-up pond or stream on his land, he embarks upon a conservation program for waterfowl. There is little danger of extinction of many rare native birds when they are provided with natural nesting areas that provide food and shelter.

Farmers themselves, noticing the small increases of wildlife on their land as conservation programs were put to work, began to ask: Why not plan our woodlots and windbreaks with a fringe of brush and berry patches alongside so that they will directly benefit birdlife and small game? And why not do the same thing when we plant our pastures with lespedeza, alfalfa, clover, grasses, and legumes? In other words, we can extend the conservation program to wildlife and make wildlife conservation a direct result of the program instead of a byproduct.

That was the gist of the remarks made by a few of these farmers orally and in letters to their farm agents, to State conservation headquarters, to AAA officials in Washington.

EARLY THIS YEAR REPRESENTATIVES OF 6 State Game Departments met in Washington with representatives of the Bureau of Biological Survey, the Agricultural Adjustment Administration, the Forest Service, the Soil Conservation Service, and the Extension Service. In a 3-day meeting they discussed the pros and cons of the idea, and concluded that "the conservation phases of the AAA program would be further advanced" if wildlife conservation were written into the program as a definite objective. Farmers would be urged to plan their conservation program so as to provide needed food and cover for wildlife as well as to protect the land.

Six months later State committeemen of the Agricultural Conservation Program met in Washington and voted that practices be revised to recognize that conservation of wildlife is a direct result of land conservation. This the Agricultural Adjustment Administration promptly did. Most important change to be made in practices previously defined as a basis for benefit payments has to do with planting of wooded areas. But wildlife will continue to gain from the whole program of land conservation—such as the planting of legumes and grasses—as it has in the past few years.

NOW THE FEDERAL GOVERNMENT SAYS TO farmers: We will recompense you for wildlife conservation under the national farm program if you do these things with your wooded land:

First, if you "cultivate, protect, maintain, by replanting if necessary, a good stand of forest trees, or a mixture of forest trees and shrubs, suitable for wildlife," you will receive $3 for each acre of conservation.

Second, if you "improve a stand of forest trees under such approved system of farm woodlot and wildlife management as is specified by the Agricultural Adjustment Administration," you will receive $3 per acre.

Third, if you plant forest trees, including shrubs beneficial to wildlife, so that they are protected from fire and grazing cattle, and also are "cultivated in accordance with good tree culture and wildlife management practice," you will be paid $7.50 an acre.

Farmers are now considering these suggested practices among themselves, and are talking them over with their county and State committeemen. If they should decide that the practices are feasible on their farm lands, they will follow out advice and suggestions of Government experts for restoring their woodlands, and then apply for the benefits due them when the job is completed.

THIS IS CONSERVATION IN ACTION. AND IT is through a program such as this that the farmers and conservation experts once more hope to see restored upon the land "the bountiful supply of wildlife, the turkeys that gobble in our forests, and the flocks of geese and ducks that honk on our streams and lakes."

●

Our thanks for the photographs used in this article and on the front cover go to Nature Magazine.

CONSUMERS' BOOKSHELF

THIS PROBLEM OF FOOD, by Jennie I. Rowntree. Public Affairs Pamphlet No. 33. 1939, pp. 32, illus. Address: Public Affairs Committee, 30 Rockefeller Plaza, New York, N. Y. 10 cents. A discussion of the importance of careful food selection and the need for a national policy on nutrition. Outlines definite aids which will help consumers select foods to meet adequate dietary requirements. Bibliography.

POULTRY COOKING CHARTS, by U. S. Bureau of Home Economics. A series of eight posters showing how to prepare birds for broiling, frying, roasting, braising, steaming, and stewing. The posters were on display for the first time at the World's Poultry Congress and are now available to the general public. Address: Superintendent of Documents, Washington, D. C. 50 cents.

POULTRY COOKING. 1939, pp. 8. Address: Bureau of Home Economics, U. S. Department of Agriculture, Washington, D. C. Free. A leaflet discussing methods of preparing poultry for broiling, frying, roasting, braising, stewing, and steaming. Includes recipes.

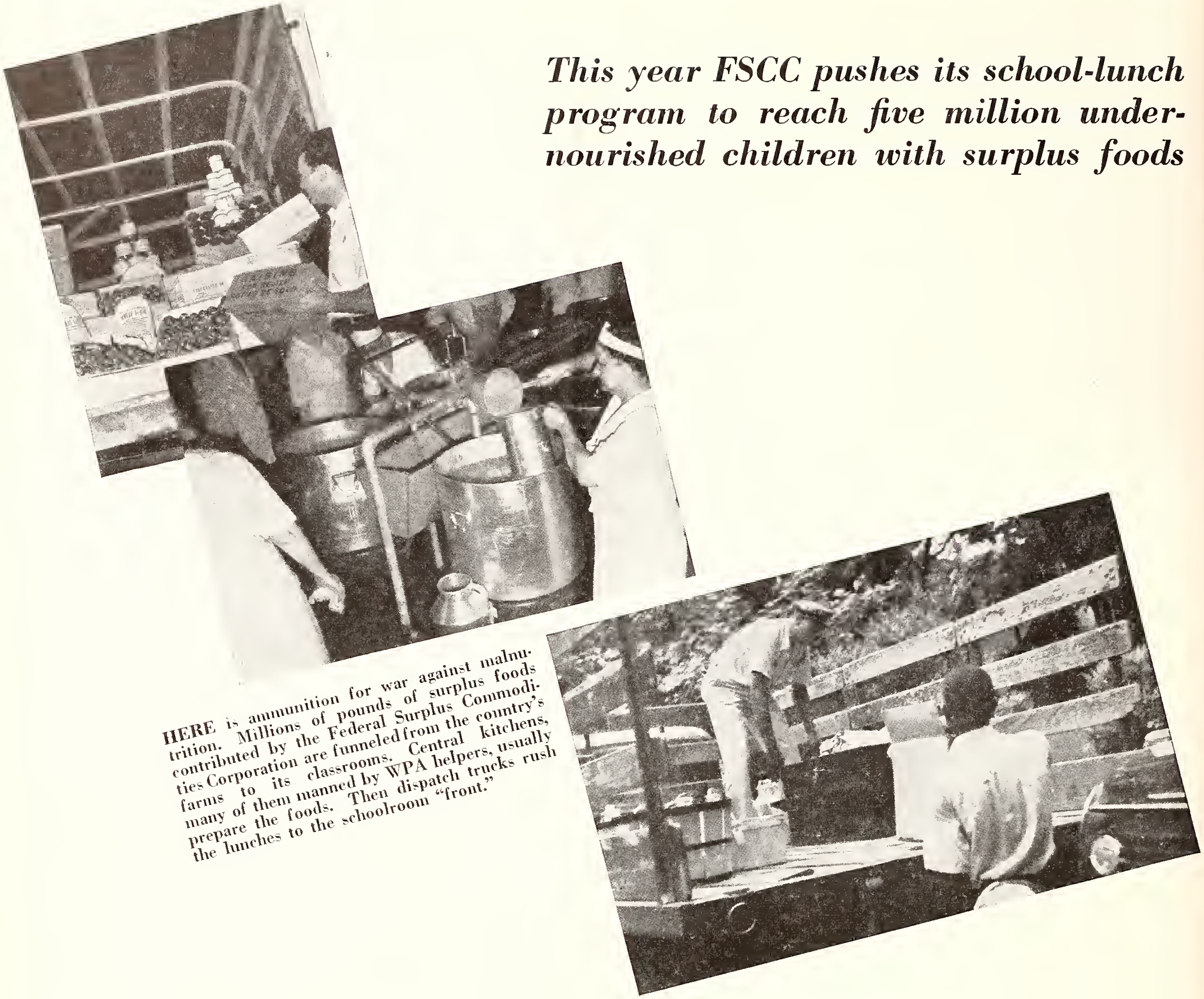
The Federal Trade Commission, on June 28, 1939, announced promulgation of trade practice rules for (1) the infants' and children's knitted outerwear industry and (2) the ribbon industry. Both sets of trade practice rules contain regulations covering misbranding of products which are of interest to consumers. Copies of these trade practice rules may be secured free of charge from the Federal Trade Commission, Washington, D. C.

MANUFACTURING AND SERVICEABILITY TESTS ON SHEETINGS MADE FROM TWO SELECTED MILL TYPES OF COTTON, by Ruth Rogers, Margaret Hays, U. S. Bureau of Home Economics, and John Wigington, U. S. Bureau of Agricultural Economics. U. S. Department of Agriculture Technical Bulletin No. 645. 1939, pp. 32. Address: Superintendent of Documents, Washington, D. C. Presents technical information on physical, chemical, and X-ray studies of two different types of cotton in comparison with certain manufacturing and serviceability tests.

PERFORMANCE ANALYSIS OF SELECTED TYPES OF KEROSENE STOVES, by Merna M. Monroe. Bulletin 394. 1939, pp. 433–518, illus. Address: Extension Service, University of Maine, Orono, Maine. Single copies free. Discusses the procedures and results of tests to determine what standards of performance may be expected from kerosene stoves under various conditions of operation. Outlines certain principles to be followed in the selection and use of oil stoves. Bibliography.

SHRINKAGE AND COOKING TIME OF RIB ROASTS OF BEEF OF DIFFERENT GRADES AS INFLUENCED BY STYLE OF CUTTING AND METHOD OF ROASTING, by Lucy Alexander, U. S. Bureau of Home Economics, and Nancy Clark, U. S. Bureau of Animal Industry. U. S. Department of Agriculture Technical Bulletin No. 676. 1939, pp. 36. Address: Superintendent of Documents, Washington, D. C. 10 cents. This bulletin presents technical information on the relation of shrinkage and cooking time of meat to the grade, the degree of fatness, the style of cut, whether standing or rolled.

This year FSCC pushes its school-lunch program to reach five million undernourished children with surplus foods



HERE is ammunition for war against malnutrition. Millions of pounds of surplus foods contributed by the Federal Surplus Commodities Corporation are funneled from the country's farms to its classrooms. Central kitchens, many of them manned by WPA helpers, usually prepare the foods. Then dispatch trucks rush the lunches to the schoolroom "front."

Dividends For Junior Consumers

A FIVE MILLION free school lunches for 5,000,000 undernourished children every school day of the year—that's one goal of the Federal Surplus Commodities Corporation for the new school year.

If that goal is attained, it will mean that for every single child who received a nourishing school lunch last year, thanks to this help from the Government, there will be more than 6 of their schoolmates sitting down to the free noonday meal this semester.

It will mean that instead of the 30,000,000 pounds of surplus goods routed from farm to schoolroom in 1938–39, many times that amount will be tagged for nurseries, grade schools, and high schools by the time next June rolls around.

And it will mean millions of dollars more for farmer pocketbooks as the Federal Government steps in to buy up food surpluses to route them to families possessed of want but of little cash.

The expanded school-lunch program is but one phase of a four-pronged frontal attack by the Department of Agriculture on the problem of moving surpluses off farms and into consumer kitchens.

Three other lines of attack are the "Stamp Plan," now operating in 7 cities and proposed for 2 others; the direct distribution of food surpluses to the underprivileged through local relief agencies; and the subsidizing of milk sales to low-income families, which will be described in our next issue.

The luncheon bell in the Nation's classrooms started out as hardly more than a tinkle 6 years ago when the Federal Government began to provide lunches for undernourished school children. Now—if the FSCC's expectations are met—that bell will grow to something along the lines of a carillon as it rings out its call to the dining table in the coming months. Reaching the FSCC goal of 5,000,000 better-fed children will depend as much on collaboration of adults at home as it does on Government officials in Washington.

Six years of feeding underprivileged chil-

CHILDREN whose parents have been made the butt of economic depression suffer the most from lack of proper nourishment. When a free hot lunch every school day is provided, the record shows better marks, improved health, and gains in weight. The Federal Surplus Commodities Corporation hopes to be able to bring surplus foods within the reach of 5 million children, like these, in the present school year.

dren with surplus foods has made the evidence conclusive for Government officials that one square meal a day can mean at least the difference between a healthy child and a pale one, between one who is alert and one who is listless. From doctors, teachers, social workers, parents, and the children themselves have come reports proving that a simple, nutritionally balanced, noon-day lunch is a good prescription for wan faces, indifference to studies, and lack of interest in games and play.

Broadening the program to include millions of needy children not now benefiting from the hot lunches involves something more than a mere announcement; it involves a campaign for cooperation of parents, teachers, and civic leaders.

First, that no one should be missed, officials of the FSCC have written to all school superintendents in the country: "The plan is designed to make surplus foodstuffs available to all properly sponsored school-lunch programs so that children attending may receive the benefits of a hot mid-day meal. Letters from educators, classroom teachers, social workers, Parent-Teacher's Associations, and public-health officials in your State emphasize the fact that better health, better attendance, improved scholarship, and discipline follow."

To get the machinery started, State Administrators of the Work Projects Administration have agreed to expand their cooperation as far as they can in the program. Officials of State relief agencies have been consulted. Local social workers and municipal officials have been informed. Existing school-lunch programs have been encouraged to make plans for expansion.

Our issue of January 30, 1939, tells in detail how the program operates. Last year 800,000 needy school children received free hot lunches prepared partly with foods furnished by the Federal Surplus Commodities Corporation, and partly with foods purchased with funds raised locally. This year's programs must be similarly organized. In the past, funds have come from the general public, from civic sponsors, business men, the parents of more fortunate children, and from a hundred other sources. Thousands of gardens—grown sometimes by the children themselves—furnished fresh fruits and vegetables for the lunches. Voluntary canning projects built up food supplies for the cold months. Community chest campaigns often put the school-lunch program at the top of their lists.

An average of 14,500 schools operated school-lunch programs last year—slightly less than 6 percent of the quarter million elementary and secondary schools in the United States. Of these, about 7,000 were served by WPA workers in communities where WPA projects functioned. The remaining 7,500 programs were financed in large part by voluntary contributions and sometimes through local government support, and were operated by parents, civic associations, and fraternal groups.

If this year's campaign attains its announced goal of 5,000,000 children, few communities in the country will be without a school-lunch program when next June rolls around.

To attain that goal the Federal Surplus Commodities Corporation will form the spearhead of a campaign in which will be united the WPA, State and local welfare departments, the Bureau of Home Economics, the Children's Bureau, and the Public Health Service. Into the States will go dietary experts to help plan lunches that are nutritionally balanced as well as appetizingly appealing. Steering committees are being set up in every State whose members will be heads of Parent-Teacher's Associations, agricultural extension agents, WPA officials, school superintendents, State and Federal health representatives, officials of welfare groups, civic and fraternal association representatives, and others interested in child welfare. These committees will push the program in their State, campaign for public support, and cooperate in the organization of programs.

Results will be measured on a nutritional ledger that 10 years hence will have on its asset column a generation made strong by a healthy and balanced diet in its childhood, and developed into better citizens by safeguards against the mental, social, and physical ravages of malnutrition.

The balance sheet today is just beginning to list assets earned from the program thus far. Running down the list, you find such items as a report from the county superintendent in Alabama who can tell you where luncheon projects are operating simply by looking at attendance records; an Ohio study which shows that 98.4 percent of the

children receiving the lunch gained in weight; an Oregon project where supplementary garden and canning projects have been set up to increase the food supply and the cost of a lunch has been brought down to 3.8 cents; the remote and impoverished rural area in Michigan where the townspeople banded together to can food for the lunches and then had the town butcher freeze, and preserve deer meat donated by the State Conservation Department until it was ready to be served.

It takes something more than sentiment and good intentions to get a program under way for a community's undernourished children. To surplus foods donated must be added others that will bring dietary balance to the lunch menus. Budgetary restrictions of the WPA will bar that agency's help for more than a third of all projects that are planned. That means community campaigns will have to be organized to raise funds for kitchen equipment, cooks, and foods necessary to supplement free supplies. It is here that local cooperation will mean the most in attaining the 5,000,000 mark.

For a close-up of one well-operated program, we swing our camera on the District of Columbia's school-lunch project.

Rolling into its fifth year under WPA auspices, this project has served 4,000,000 hot, well-balanced lunches since 1935. That was the year WPA took over from the small group of civic-minded individuals who had run the program until then. This year, plans have been made to give approximately 10,000 needy children the free lunches under the expanded program, an increase of 5,400 over the number a year ago. Children in more than 80 schools will benefit from the project, while several hundred WPA workers—sole support of their families—will receive employment in the job of preparing, distributing, and serving the food.

Sponsors of the project are 2: the Board of Public Welfare, and the Board of Education. The Board of Public Welfare certifies the needy children as being eligible for the lunches, and also provides funds for purchase of foods necessary to supplement the FSCC contributions.

The Board of Education provides a central kitchen, space in each school to serve the lunches, tables and chairs, and a small stove for reheating hot dishes.

EFFICIENCY and speed must be the watchwords in the kitchen when the lunch bell rings for several thousand children at the same time. These WPA workers are preparing sandwiches in the District of Columbia project's kitchen. Many communities unable to receive WPA help have organized their own projects with the help of civic, fraternal, and other groups.

You begin at the central kitchen, a school building converted into the staff headquarters of the project. The day's activities start at midnight. Then lights flash on in the central kitchen, cooks light up the 18 stoves, and soup meats are prepared and cooked for broth. Vegetables prepared the previous day are mixed with the broth, and then transferred to huge sterilized cauldrons where they are kept hot until the signal is given for shipping.

At 7 a. m. more kitchen workers appear, and in another room the job of making thousands of sandwiches is begun. Raw vegetables—if the menu calls for them—are prepared. In a third room fresh fruit is uncrated, counted, and each school's allotment is set aside. A dairy several miles away, meanwhile, loads trucks with thousands of bottles of milk and sends them on their rounds to the different schools to insure each child getting a half pint of milk a day.

IF you want to start a School Lunch Program in your community, you can secure full information concerning Federal participation by writing to this address:

Director of School Lunch Programs,
Federal Surplus Commodities Corporation,
1901 D Street NW.,
Washington, D. C.

Well-balanced, nutritious, always including a hot dish during cold weather, the lunches, prepared under the direction of expert dietitians, average in cost 7 cents per child a day.

In the rush of activity you begin to see a systematic plan evolve. The hot soup is transferred from the cauldrons to sterilized soup cans which are tagged each with the route number, the name of the school it is destined for, and the number of servings it contains. Sandwiches are packed carefully in boxes, again tagged and prepared for shipment. The same is done for fruits, desserts, and any other foods listed on the daily menu. As smoothly as a well-oiled machine, the routine goes on. Soup kettles, boxes, baskets are checked and rechecked, then taken to their "stations," one for each of the 10 trucks whose job it is to distribute the foods. Promptly at 9:30 the trucks rumble up to the shipping entrance, drivers and helpers load the food and in 20 minutes the trucks roll off to begin the job of distributing the lunches.

If you go to any of the schools on their list, you will see the trucks unload and see the WPA employees check once more the shipments. The tables have been set, the sandwiches and fruit are laid out, while the hot dish, still in its sterilized container, is kept in a pan of boiling water until ready for serving.

At noon there is a rush at the door. Hungry boys and girls clamor into the lunchroom. Teachers check on clean hands and perhaps speak a few words on cleanliness and proper table manners. After lunch, there may be songs, or a story, or a 2-minute talk on why you need fresh vegetables and fruits and milk to make good teeth and strong muscles. Those messages are carried home for parents who may never have been told why it is wise to choose foods properly even with the most limited means.

Behind the scenes of all this there is a smoothly operating central office that plans menus, studies diet suggestions sent out by the FSCC and the WPA, makes food purchases weeks in advance, sees that the kitchen functions properly, or makes sure that the laundry in the basement is up on its schedule of keeping uniforms and towels clean. It is a 24-hour a day job to provide these 30-minute lunches.

And when it is done, what better thanks could there be but to listen to the exclamation of the 6-year-old who pauses between bites to say: "Gosh, but it's good!"

THE COMPANY has its bank, possibly an imposing edifice downtown, but the employees of the company have a bank, too, their own credit union. They own it and they manage it. When they run ahead of their budgets they save money in it. When they run behind, they borrow money from it.

When Consumers Run Their Own Banks

*Credit unions, owned and operated by nearly two million consumers, encourage thrift and make possible borrowing at reasonable rates**

*"**THE CREDIT** union showed me how to get out from under a mountain of debts—and it even got me started saving." That's one credit union member speaking.*

Another: "If John hadn't been a member of the credit union down at his shop, I don't know how we would have paid all the bills for the doctor and the nurse and the hospital when he had that operation last spring."

"Why, we practically had our baby on the credit union. And we paid back the whole loan in 10 months."

"We've been saving regularly—even if it is only a couple of dollars every payday—since I joined the credit union."

"No, we've never borrowed yet from the credit union—but it's good to know you can borrow the money there in a hurry, if you have to—and not stick your head into a loan shark's jaws."

PREVIOUSLY ARTICLES IN THIS SERIES ON consumer credit have talked about instalment buying, small-loan companies, loan sharks, pawnbrokers, remedial loan societies. Talking about credit unions, we come to what consumers themselves are doing about credit and savings. And to the almost 2 million Americans who are members of credit unions — cooperative "baby banks," they sometimes are called.

These folks have saved up at least 135 million dollars with their more than 7,500 credit unions. Out of these savings a total of about 1½ million loans were made to credit-union members last year. About one out of every two members needed—or found it economical—to borrow during the course of the year. From the reasonable interest charged the members who borrowed, those whose savings made possible the loans earned "dividends" on their savings of well over 3½ million dollars.

TWO BIG PURPOSES OF CREDIT UNIONS ARE to make it possible for members to borrow money reasonably and safely when they need it, and to encourage thrift. The twin purposes work hand-in-hand, because while some folks are putting away their savings, others are borrowing out of this pool of savings.

Credit unions serve the small man. They have been called "people's banks."

The average size of credit-union loans last year was just about $100. Of all the agencies of cash credit for consumers, only pawnbrokers make smaller loans on the average.

Why do folks borrow from their credit unions? Sometimes it is to meet an emergency; sometimes to get out from under a load of high-interest debts; sometimes to do economical purchasing with the borrowed cash.

First in the list of reasons, and explaining about 20 percent of all loans, is the item called "consolidation of debts." Behind that generalization, of course, are a lot of small debts, often at high rates of interest. Or

---

** Previous articles in this series appeared in the Consumers' Guide for Jan. 30, Feb. 13, Feb. 27, Mar. 13, Mar. 27, Apr. 15, and May 15, 1939.*

instalment payments with high carrying charges. Perhaps doctor's bills or dentist's bills. When these press down too hard, a family may seek one lump-sum loan which will keep the collector from the door, and make it easier for them to budget their way out of debt.

Medical and dental bills, and hospital expenses, account for almost one out of five loans by credit-union members. Leaving aside the "consolidation of bills," these expenditures for health are the biggest single reason why consumers borrow from their credit unions.

Then come household expenses and the purchase of household equipment; clothing; and automobiles and auto repairs. Auto purchases are increasing in importance, especially with credit unions that have quite a bit of spare cash to loan. As a rule, members are allowed to borrow two-thirds of the price of the car, giving the credit union a mortgage on the car until the debt is paid. Such loans give the consumer a chance to shop with cash, and hence to shop with more freedom. At the same time, they seem to be a safe and profitable way for the credit union to put its funds to work.

MECHANICS OF JOINING OR BORROWING from a credit union are simple. To join a credit union, one buys at least one share. Shares sometimes cost $10, quite often $5. That doesn't have to be paid all at once, though. One can make a down payment of only 50 cents or a dollar on his share. But money saved does not start drawing dividends until a full share has been paid for.

Only a member may get a loan. But a person may join at the time he is making application for a loan. He doesn't have to pay out money in order to borrow—except for a 25-cent entrance fee, and a down payment on a share. If his application for membership is approved by the board of directors, and the loan application is O. K.'d by the credit committee, he becomes a member of the credit union and gets the loan almost at the same time.

EACH CREDIT UNION—WITHIN CERTAIN broad limits—makes its own rules, and uses its own judgment, in the matter of security for loans.

Laws allowing for the incorporation of credit unions generally set the top limit for loans without security—"character loans." Federal law at present allows Federally chartered credit unions to lend no more than $50 on the unsecured note of a member.

A common form of security is the signature of a cosigner or endorser, by which another member agrees to make good should the borrower fail to pay up. Mortgages on goods bought with the borrowed cash—such as cars or household equipment—may also provide adequate security.

American families are good credit risks, commercial lenders generally agree. Credit union experience amply supports their confidence. Figures for the Federally chartered credit unions show only a tiny fraction of one percent charged off as loss from bad debts, 5 one-hundredths of one percent that is, only a nickel on each $100 loaned. In 4½ years, these credit unions made loans of 113 million dollars, and found it necessary to charge off only 69 thousand dollars in bad-debt losses.

SHOPPING FOR INSTALMENT CREDIT OR A loan at a bank, the consumer finds that interest rates may be pretty complicated things to figure out. Not so at the credit union. Credit unions state their charges clearly and fairly—in terms of percentages per month on the outstanding balance. Since a loan is being repaid in weekly, semimonthly, or monthly instalments, and the balance is dwindling steadily, that is the fairest way of stating the interest—as a percentage of the amount of which the borrower still has the use.

Most common interest rate among credit unions is one percent per month on the unpaid balance of the loan. That is the top rate permitted under the Federal Credit Union Act. Many credit unions charge even less—sometimes one-half or two-thirds of one percent. A few State-chartered unions charge a little more than one percent.

When the rate is stated the borrower knows that is all he has to pay. No additional charges are permitted—no "bookkeeping fees," or "investigation charges," or fees "for making the loan." For lateness in payments, a nominal penalty fee may be assessed. If the member offers any good reason for delay, this penalty is usually waived.

At one percent per month, the true interest rate is 12 percent per year. The borrower is paying only for the money of which he actually has the use, so this does *not* mean $12 for a $100 loan. On a $100 loan, repaid month-by-month in 12 equal instalments during the year, the interest would be $6.50. If the rate is two-thirds of one percent a month, the interest for the whole loan would come to $4.33.

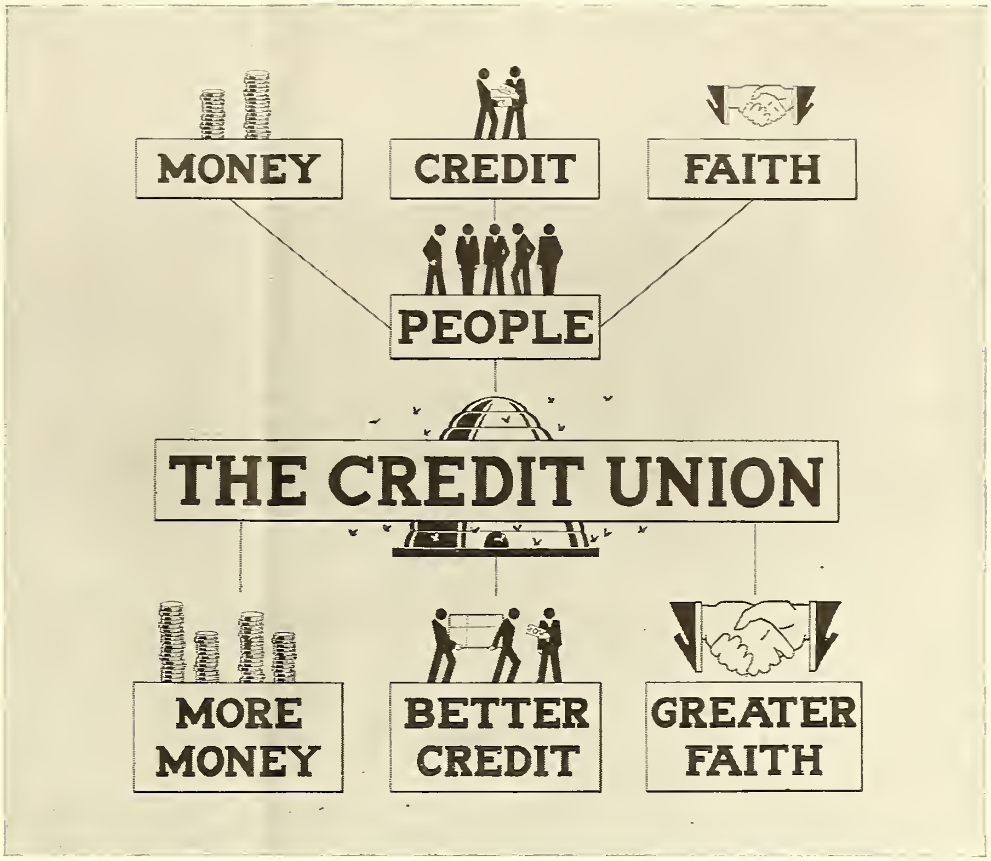
A member can get a loan from his credit union at a lower rate of interest than he will find at almost any other source of consumer credit. (Rates at various types of consumer agencies were discussed in "Selling Credit to Consumers," in the January 30, 1939, *Guide.*) Only the personal-loan departments of commercial banks are likely to offer credit for as little as the one percent a month which is the typical credit union rate.

Volunteer service by its members is one reason the credit union—like other cooperatives—keeps down its costs and its rates. The management of a plant or office may allow employees to use company time for

THE MEMBERS of a credit union know each other. They work together in the same factory, or office, or store, or belong to the same lodge, church, or labor union. They may be neighbors who live in the same community or in the same housing project.

credit-union business. Sometimes management donates office space so that many credit unions do not have to pay rent.

But the chief reason why credit unions can make loans at reasonable rates is something which is inherent in the nature of the organization, and in its cooperative character. Costs of investigating make up a large share of the expenses in a commercial small-loan agency. In a credit union, on the other hand, the members know each other. The credit committee can decide on applications for loans without extensive and expensive investigation. Knowledge of the applicant, and ability to evaluate the purpose of the loan are usually right at hand in the credit committee.



PEOPLE pool their modest savings in credit unions so they can save conveniently and borrow money cheaply when they need it. When they do borrow from credit unions, one time out of five they borrow to consolidate their debts. Almost as often they borrow to pay medical and dental bills. Other reasons for borrowings, in order, are to take care of household expenses, to buy household equipment, to finance clothing purchases, and to purchase and repair automobiles.

Thrift is the second major purpose of the credit union. The credit-union office is usually handy to the worker on pay day. And the money saved with the credit union earns "dividends" which are generally well above what any savings banks will pay as interest. The usual rate of credit-union "dividends" on savings is 4, 5, or 6 percent a year.

If a large sum has been accumulated from the interest on loans paid by members who borrowed, then the credit union may vote to raise its dividend rate. Or it may decide to lower the interest rate which borrowers pay. Or it may just coast along with the same interest, and the same dividend rate, as last year's, and accumulate a bit more of a reserve, or spend more on education or publicity.

A young credit union, which has been managing on volunteer help, may decide to pay some salary to a hard working treasurer, and perhaps hire paid office help. Another use for accumulated funds is borrowers' protection insurance by which the credit union insures the family of a borrower against the risk of having to repay a loan in case the borrowing member dies.

At any rate, the members themselves decide what dividend rate to declare after they hear the treasurer's report and recommendations of its board of directors, at their annual meeting.

The modern cooperative credit movement is almost a century old. It is world-wide. In many countries, cooperative credit societies are organized chiefly among small farmers. In some nations, small businessmen have made extensive use of the method.

In the United States the credit-union movement is a consumers' movement. Its largest strength is in the towns and cities.

The first State law specifically allowing for the incorporation of credit unions was enacted by Massachusetts 30 years ago. All but 6 of the other States have since followed suit.

The Federal Government began issuing charters to credit unions only 5 years ago. There are now over 3,300 Federal credit unions and over 4,300 State-chartered credit unions in existence. Today more people belong to credit unions in Illinois than in any other State; next in credit-union membership come Massachusetts, New York, Pennsylvania, and Wisconsin.

Credit unions are formed by people who know each other and are tied together in some way. Like the people who work together in a factory, a store, or an office. Members of the same trade union, or people in a church, or members of a fraternal order, or of a consumers' cooperative society, may form credit unions. So may people who live rather closely together, as in a housing project, or sometimes, in a farming community.

Employment is the most common bond of credit-union membership. Among the 3,347 Federal credit unions which had been chartered by the end of June of this year, 2,879 were listed as "occupational." Teachers in public schools had formed 227 credit unions; other Government employees, 489; workers in the petroleum industry, 234 credit unions; employees of stores, 190; railroads, 154; and textiles, iron and steel, electrical products, manufacturing, public utilities each over 100.

Among the "associational" credit unions, members of cooperatives had formed 92 credit unions; fraternal and professional groups, 124; religious groups, 93; and members of trade unions, 42.

Among those classed as "residential," folks in urban communities had formed 23; and those in rural communities, 94 credit unions.

A credit union is as democratic as the members make it. It is the members themselves who, at their annual meeting, elect their own directors and committee members; who run the institution. At a credit-union meeting, as in any genuine cooperative, each member has only one vote, regardless of the number of shares he happens to hold.

Like any democratic organization, credit unions are not perfect. In some credit unions, for example, a few people do all the work while most of the members have only a faint idea of the aims or workings of their organization.

HOW TO FORM A CREDIT UNION

1. **Get credit-union literature from the Farm Credit Administration, Washington, D. C., or the Credit Union National Association, Madison, Wisconsin.**
2. **Get a group together and discuss the idea.**
3. **Talk to local credit-union officials and members.**
4. **If it seems like a good idea, send a preliminary application to the Farm Credit Administration, or write to your State Banking Department for State charter papers.**

There is no charge or obligation for the FCA application, and, if you wish, a field representative of the FCA will help you make out the formal papers of incorporation. There are, however, varying charter fees for both Federal and State charters when granted.

Some credit unions are too stodgy or timid. They have large amounts of savings available for loans to deserving members, and yet they make it needlessly difficult for borrowers to get loans—for example, requiring cosigners when other security is adequate. Or they narrow their definition of the "provident purposes" for which a loan may be made.

Too conservative a loan policy may result in stagnation. With few loans being made, a large cash surplus may be accumulated. But with no outlets for most of this money, the credit union may try to set a limit on the amount of any one member's weekly or monthly savings. This discourages membership in the credit union, and eventually there may not be enough money to meet the demands for loans—and thus both the lending and the saving purposes of the credit union are defeated.

Few credit unions are doing enough educational work with their members and prospective members. People who are eligible to membership to the credit union sometimes do not even know that a credit union exists in their plant or office. Members themselves may be unaware of the possible services of their credit union. For example, they may use the credit union only to get a loan, and fail to start the systematic saving which may help them next time to meet an emergency out of funds already saved. Half of all Federally chartered credit unions, however, already have educational committees at work, and the idea seems to be spreading.

Credit unions still have to educate most of their members on the costs of other forms of credit. For example, in a recent canvass of credit-union members in a number of industrial plants, many said they were buying goods on the instalment plan because "there are no carrying charges," and "it doesn't cost any more to buy for credit." As a matter of fact, they had probably never compared cash and credit prices for the items they were buying; or carrying charges on instalment deals with interest rates at the credit union. Nor had they learned the first rule of buying on credit—that credit costs money.

With the cooperative method apparently a growing success in the field of consumer credit, alert members in some credit unions have sought to extend the method to other forms of consumer action. They have arranged, for example, for members to save by pooling purchases of household goods.

Taking one step further, in some cases, they have taken the initiative in setting up cooperative grocery stores and gasoline stations. Some credit-union people have gone in for group payment plans for medical care and group insurance against the costs of hospitalization.

The credit union as such does not step outside its own sphere into these allied activities, but these are some of the possibilities of extension of the cooperative method which credit-union members—always in the light of local circumstances—are thinking about.

To some people—both inside and outside of the credit-union movement—credit unions look most important as a step toward a greater democracy in economic life, toward a share of control by the average man of his own economic destiny.

To other people, credit unions may be simply—and significantly enough—a means of keeping workers out of the clutches of loan sharks and high-rate legal lenders.

Members, themselves, may think of their credit union as a reasonable source of money in a pinch or as a place for the regular deposit of savings at a good rate of return, or both.

Some employers feel that credit unions are important because they "keep the workers happy," and at least partially insulated from discontent caused by financial worries and debt; and because they save them the bother of having to comply with employees' wage assignments and garnishments.

Free literature to ask for in writing the Farm Credit Administration, Washington, D. C.

1. **Circular No. 10—"Federal Credit Unions," 8 pages.**
2. **Circular A-12—"How Consumers Cooperate for Credit," 6 pages.**
3. **Preliminary Application to Organize a Federal Credit Union.**
4. **Organization Chart of a Federal Credit Union.**

Many credit-union members and many leaders of trade unions think of the credit union as a place where workers get experience in handling their own financial affairs.

Forty-two State legislatures and the Congress of the United States appear to regard credit unions as a combination of these possibilities. By passing laws allowing for the incorporation of credit unions under State charters and Federal charter, they have said that it is good public policy to encourage the growth of credit unions—provided the people want them enough to go about setting up their cooperative "baby banks" themselves.

●

Canada, which already has laws setting standards for containers and standards of quality for canned fruits and vegetables, has recently recognized the necessity for more standards by passing another law.

This law authorizes the Dominion Trade and Industry Commission, after study and investigation, to—

(1) Prescribe standards of quality for any commodity and to prescribe the manner in which the commodity may be sold, packaged, branded, or labeled, and to—

(2) Prescribe the words by which the material content of any commodity shall be represented.

Violation of the orders of the Commission when they are issued are liable to punishment by fines up to $5,000 in the event the offender is a corporation, and by fines up to $1,000 and imprisonment for a term up to 6 months in case the offender is an individual.

Draw Your Own Food Charts

They will help you to keep track of food costs and to measure their changes from month to month

IGNORANCE, a wise man once said, never settles a question. The question as to whether food costs are wandering off the lot, or staying within reasonable limits, can't be answered by suspicions or somebody's say-so.

It takes a nice compound of facts and valuations to get a true picture of the dent that food costs make in consumer pocketbooks. Facts about the money going into consumer pocketbooks, as well as the money going out for nonfood necessities. Facts about the money going to farmers who produce foods, to workers and to business enterprises that prepare and distribute them. Facts about supplies of food, and the demand that people at home and abroad make on those supplies. Running along with this fact-finding, must be knowing how to evaluate them.

No juggler ever balanced as many balls as the facts that consumers must mentally balance when they attempt to pass judgment on food prices. But for consumers who want to look behind their bills and learn how our system of supplying human wants works, the mental exercise of studying these facts is stimulating and challenging.

Last issue we gave you the facts about food supplies in prospect for the coming year, up until next summer. That report showed that supplies of most foods will be equal to, or larger than, supplies during the past 3 years. The experts say they can't see ahead a shortage in any food, and that for several the supplies will be well above the amounts we usually consume.

Now we show on the following two pages the paths that prices of some foods have taken in past years. This is not a bit of ancient history, but a matter of present importance. One way to tell whether present prices are behaving or misbehaving is to measure them against past prices.

There is space to show only 8 foods, unfortunately, but these 8 are foods that figure prominently in family food bills. For each we show the routes prices took in predepression years, at the bottom of the depression, last year, and up to the middle of August this year. There the heaviest lines, representing 1939 stop, awaiting further figures which in this case are gathered by the U. S. Bureau of Labor Statistics.

From this point on, *you* can draw the lines. Each month we will give you the figures as they are released. Above the month of September, for instance, put a dot at the place each price stands, then continue the heavy line to this dot. And so on, each month, as additional reports are given in *Consumers' Guide*. Remember, these are *average* prices for the country. Prices charged in your stores may vary, up or down, from the general picture.

Our 8 road maps of food prices show up three significant facts about prices before the outbreak of war in Europe.

For one thing, 7 out of the 8 foods were costing consumers less in August this year than in August of 1938. Potatoes were the exception, and they were selling for a great deal less than in 1933. It's the habit of potato prices to show great swings up and down from one year to another.

Again, with the exception of the two meats, the other foods were selling closer to their low 1933 level than to their high 1925–29 level. Both round steak and pork chops were priced, nevertheless, considerably under their predepression prices.

Third, some foods move up and down in price every year, showing a "seasonal" change. Seasons of greatest abundance tend to push prices down, and seasons of more limited supply tend to push them up.

Be careful, when you read these road maps, not to compare one chart with another, because each one has been drawn to a different scale. You can see this clearly if you read the numbers on the left side of each chart.

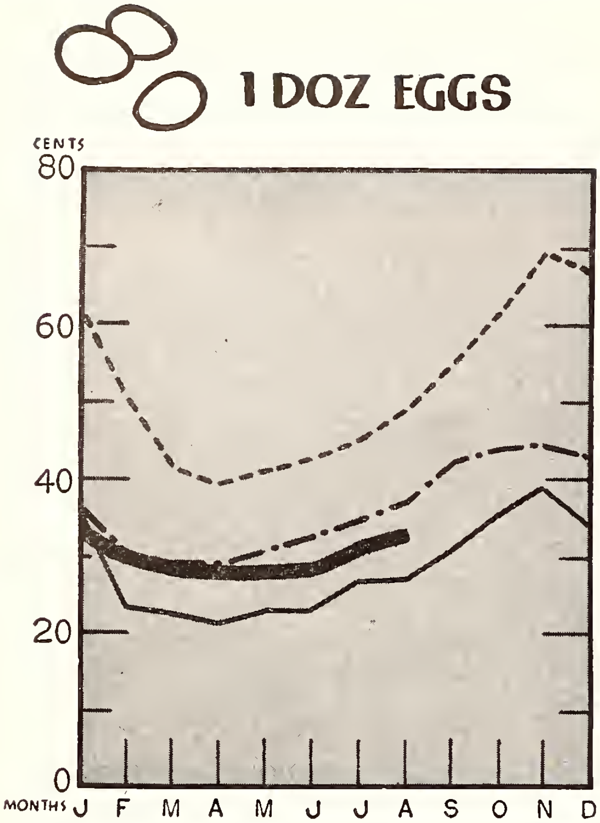
The route that 1939 prices will take after August may be uphill in the case of some foods, and steady or down in others.

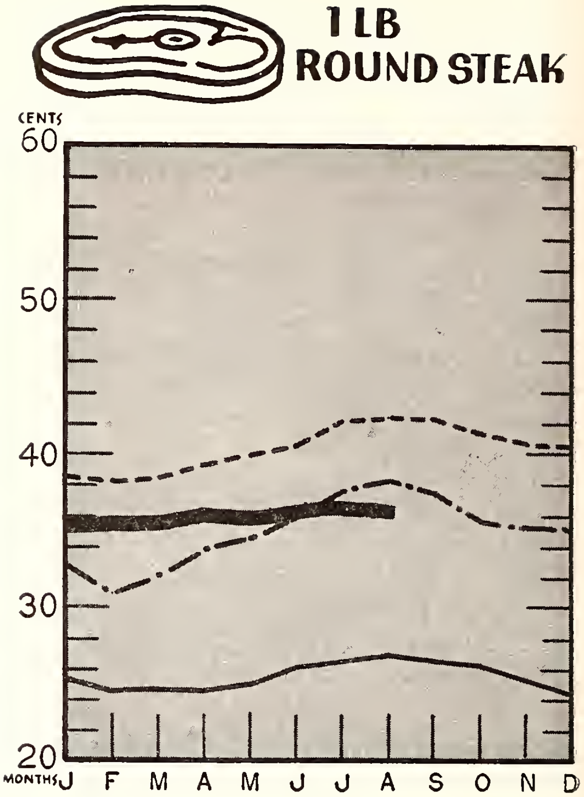
Some increase in food costs as a whole would have occurred this fall—war or no war. That's because prices in general were on the upgrade. Then, too, food costs usually edge up a little in the fall and winter months. Early in September some foods jumped suddenly after war was declared—partly because of speculation, partly because consumers were ignorant of the fact that food supplies were not scarce. By the end of September at least part of these increases had begun to shade off as consumers and business were reassured about supplies, and as business showed greater caution about overreaching consumer buying power.

Reassuring as the picture to date appears to be, consumers will do well to watch food prices carefully as they do their daily marketing. Wise consumers will shop around and compare prices. They will watch for and study reports on prices in other cities.

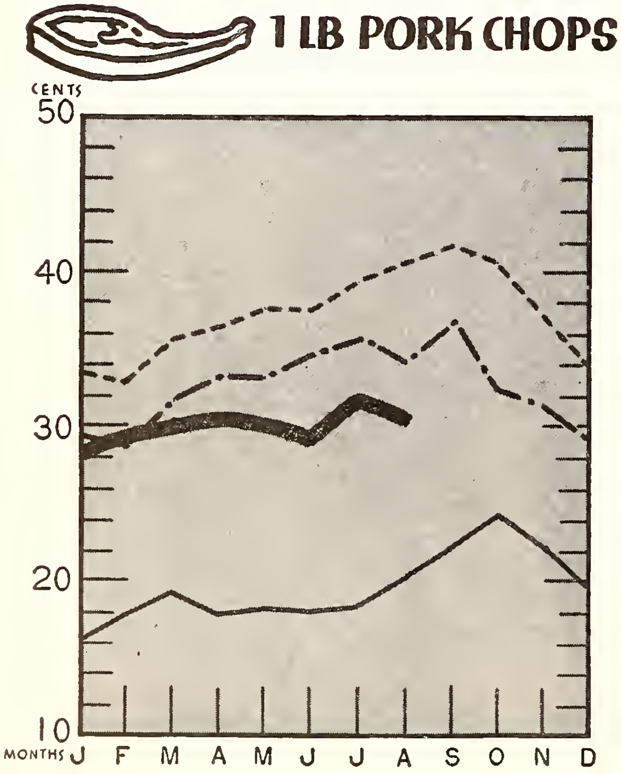
When your prices seem out of line with others, report them to your local consumer organizations, and talk them over with your mayor or with trade leaders in your community. That is one way you can help to keep things in balance.

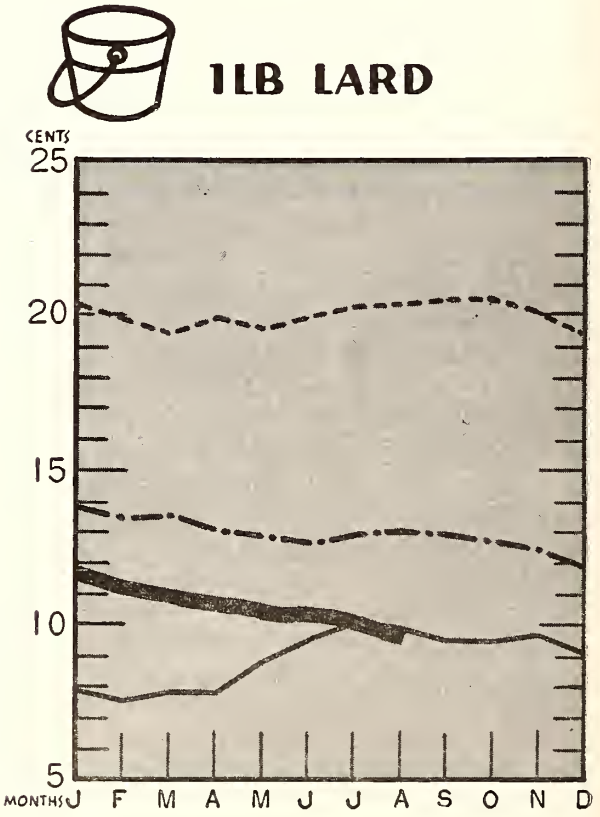
Retail food prices are collected by the Bureau of Labor Statistics. This Bureau's monthly release reports prices of 84 foods in 51 cities. Since early September of this year, when some foods started climbing uphill, the Bureau has also collected prices every Tuesday for some 15 staple foods in a dozen important cities throughout the country. Each Tuesday's prices are published the following day. Consumers who want detailed information about food price changes can get on the mailing list for these mimeographed releases by addressing the Retail Price Division, Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C.

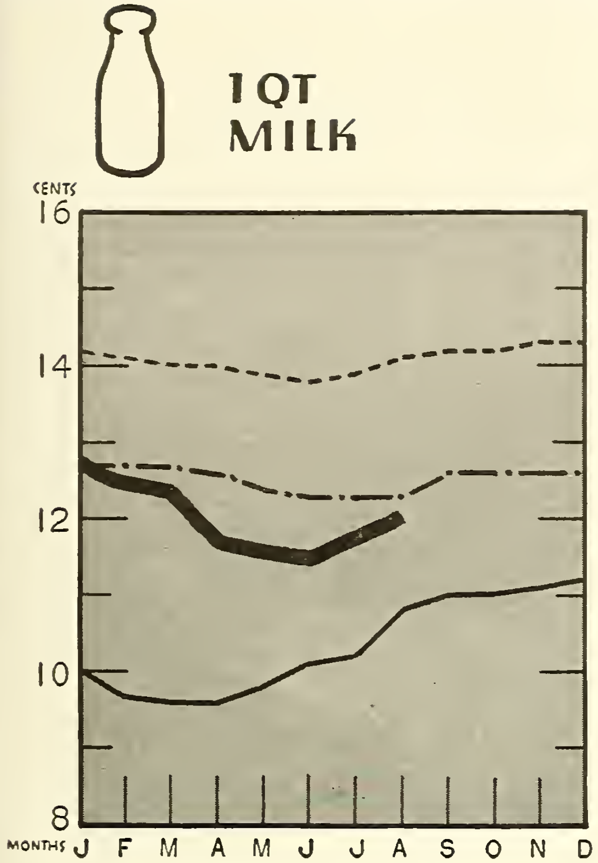


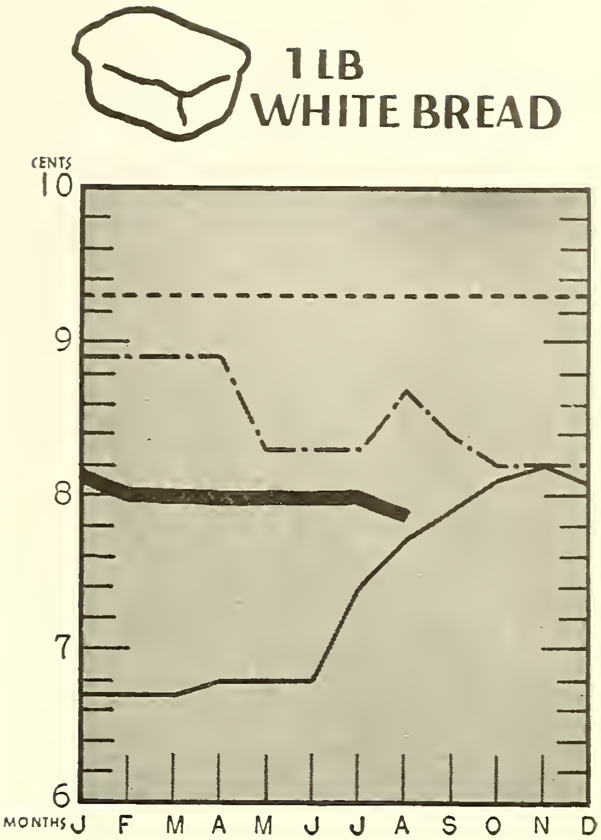


- - - - - - 1925-1929
———— 1933
—·—·— 1938
▬▬▬ 1939

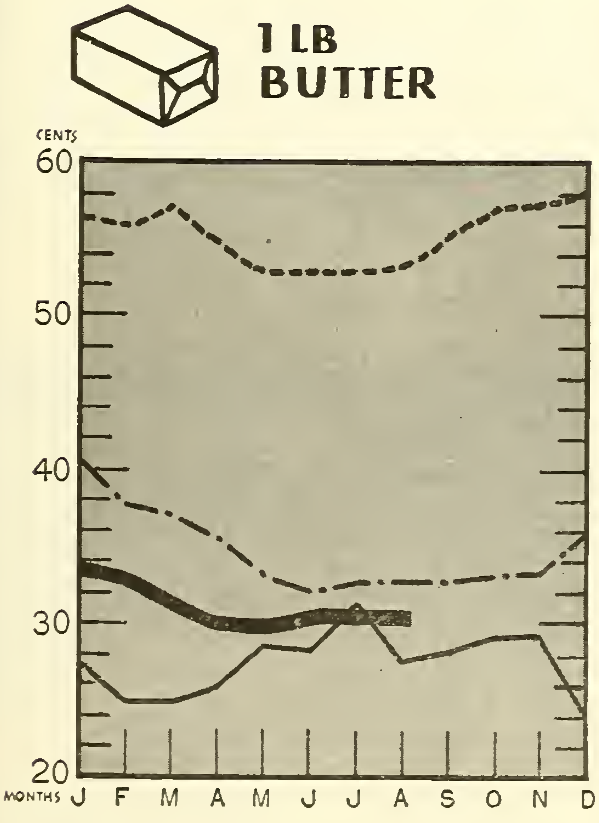


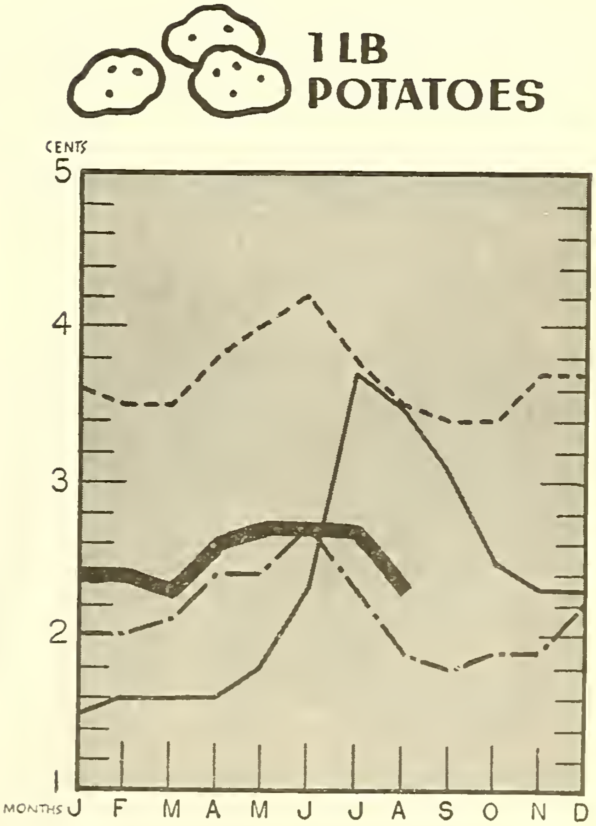



1 QT MILK


1 LB WHITE BREAD

- - - - - 1925-1929
—— 1933
—·—·— 1938
▬▬ 1939


1 LB BUTTER


1 LB POTATOES

IN THIS ISSUE

OCTOBER 15, 1939 ● VOLUME VI, NUMBER 9

Building Shelter and Larders for Wildlife 3
Consumers' Bookshelf 5
Dividends for Junior Consumers 6
When Consumers Run Their Own Banks 9
Draw Your Own Food Charts 13

U. S. GOVERNMENT PRINTING OFFICE 182888°

U. S. F. S. RECEIVED
LIBRARY
DEC 15 1939

14 AD422c

CONSUMERS' GUIDE

NOVEMBER 1, 1939

CONSUMERS' GUIDE

NOV. 1, 1939 VOLUME VI, NUMBER 10

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July, August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

MELODRAMAS, and exciting ones, sometimes start off with someone unexpectedly getting a million dollars. It's a happy thought, and most of us at one time or another have mused over what we would do if we had a million.

Suppose, instead, you were unable to get a job and were dependent on Government for a minimum of subsistence, and someone gave you 50 cents extra a week for each person in your family with the proviso that you spend it on food. What would you do with it?

The Federal Surplus Commodities Corporation, Uncle Sam's agency which tries to correct diet deficiencies by diverting surpluses of food from farms into the market baskets of handicapped families, has been giving families 50 cents a person a week extra to spend on food.

Readers of *Consumers' Guide* know about this. It's the Food Stamp Plan—the Orange and Blue Stamp Plan, now working in about a dozen cities. Before the plan started, people wondered what use would be made of these extra 50 cents. Now, after collecting statistics on the operation of the plan during its first 3 months, the FSCC has a tentative answer. It's too early to draw final conclusions.

On the basis of the limited time and few localities in which the plan has been working, it would seem that if you give very low income people an extra 50 cents per person, about half of the money will go for butter and eggs. That's what the record shows, so far.

Next in popularity come fresh vegetables and fresh fruits—if the families live in the northern part of the country; in southern regions, wheat products are apt to be even more popular than fresh fruits and vegetables.

Based on the experience in 5 cities (Rochester, Dayton, Birmingham, Seattle, and Shawnee), families spent about 25 cents out of every dollar's worth of blue stamps on eggs.

Butter was runner-up in this food popularity contest with families spending about 23 cents out of every dollar's worth of blue stamps on it.

Fresh vegetables, that is green peas, ripe red tomatoes, leafy green cabbage, and the arrogant onion together accounted for 19 cents out of every dollar's worth of the blue stamps.

Peaches and pears between them got 12 cents out of every blue stamp dollar.

Flour took about a dime's worth of blue stamps out of the blue stamp dollar, dried beans about 4 cents, while corn meal, rice, and dried prunes used up about 2 cents each. People who read their lines closely will notice that oranges and grapefruit don't get a mention in this account of what happens to a blue stamp dollar. That's explained by the fact that these two products were out of season during the period this study covers.

When they were in season and on the list of foods that could be bought with blue stamps, together they beguiled the blue stampers into spending slightly more than 9 cents out of every one of their blue stamp dollars on them, about 5 cents for grapefruit, and a little more than 4 cents for oranges.

The Federal Surplus Commodities Corporation didn't collect these figures simply to exercise its curiosity. They tell a story that has significance to everyone interested in the health of America and in the prosperity of its farmers.

Blue stamp purchases have been the kind of purchases that are necessary to balance the diet for physical well-being. Families with a dollar a week or less to spend on food can't afford ordinarily to buy the fresh fruits, the fresh vegetables, the eggs, and the butter that are so important in a health-giving diet. But with the blue stamps they are able to build up their diet defense against ill health.

The President of the Federal Surplus Commodities Corporation, speaking on the blue stamp purchases, let a half dozen dramatic statistics take the stage to show what they mean to farmers.

If three-fourths of those relief families which now would be classed as eligible actually use the blue stamps when and if they are all given the blue stamp privilege, about 15 million persons would take part in the program.

If this should ever happen, he went on, "the Stamp Plan offers a potential annual market for over 300 million pounds of butter, about 352 million dozen eggs, over 25 million bushels of wheat in the form of flour, over 6 million bushels of corn in the form of corn meal, about 140 million pounds of rice, over 87 million pounds of prunes, and about 227 million pounds of dry beans. For fresh fruits and vegetables there is a tremendous potential market. Given purchasing power, poor people will buy trainload after trainload of citrus, tomatoes, cabbage, peaches, and other fruits and vegetables."

Blue stamps, however, are designed only to take up the slack created by unemployment and excessively low incomes. When all the men and women standing in line waiting for employment have moved over to take their places in the lines in front of pay windows stamps won't be necessary.

At that time the Federal Surplus Commodities Corporation says the stamp plan will close up like an accordion. But if hard times should succeed the period when payday comes regularly, then the stamp plan can be pulled out and expanded like an accordion, too.

As the Federal Surplus Commodities Corporation puts it, "it will be there to do a minimum job in terms of minimum diets below which the public health would be endangered."

DURING THE 6½ YEARS UNDER THE TRIPLE-A, farmers have built up an organization through the processes of economic democracy which can carry out any farm program that it may be necessary to adopt to meet rapidly changing situations.

"In every farm county in the United States, farmers themselves have elected certain of their neighbors to serve as county and community committeemen for the local administration of this program. In every agricultural county in the United States, the leadership which has come up through this process has gained invaluable experience in local administration.

"I ask you to stop and consider the importance of this county committee set-up. It is one of the most significant developments that has occurred in the history of American agriculture. It is one of the largest experiments in economic democracy. By economic democracy I mean the application of the democratic principle to our economic life. It is an extension of our political democracy to our dollars-and-cents affairs."

R. M. EVANS,
Administrator, A. A. A.

Our thanks to WPA for the photograph of the two small milk consumers on the cover of this issue.

Boston Drinks "Surplus" Milk

A new plan sponsored by the Department of Agriculture opens up the sluice gates to let more milk flow into the homes of needy families and to build up farmers' income from surplus milk

ASK the people whose job it is to keep track of America's diet and they will tell you that Boston's experiment with low-priced milk is something to watch.

With the help of the Federal Surplus Commodities Corporation, milk is being sold in Boston for 5 cents a quart to families receiving relief and for 7 cents a quart to families with wage earners on WPA.

Ordinarily, milk retails in Boston for 12 and 13 cents a quart. But since many families could not afford to pay that much for milk, the regular retail price has acted like a dam which barred the way to milk needed by low-income families.

Monday, August 7, 1939, the first day of the new plan, lines began to form in front of the 100 or so milk depots manned by WPA employees in Boston. All morning long families walked home with bottles of bargain milk, until by 2 o'clock, when the depots closed, 43,000 quarts of milk had found their way onto the tables of Boston's undernourished families.

Tuesday morning, the second day of the plan, the lines were even longer, and by 2 o'clock 60,000 quarts of milk had been sold at the bargain prices. A week later, sales were 72,000 quarts a day.

Just so these figures will have something to stand up against for comparison, the average daily amount of milk sold in Boston during June of 1939 was 578,000 quarts.

Not so long ago, the consumers' counsel of the Department of Agriculture, when looking into the problem of too much milk on the farms and too little milk in the cities, made a simple analysis of what was wrong.

People talk about consumers, he said, as if they were all alike, like grains of sand. Actually consumers fall into distinct groups whose buying problems differ sharply.

Among milk consumers, rough analysis shows that there are 3 classes. Class I consists of the group of consumers who have adequate incomes and can afford to buy all the milk they *want;* they can afford to pay to have it delivered; they can afford the luxury of a charge account; and they can pay for all other frills and furbelows that go with modern merchandising of this simple but necessary food.

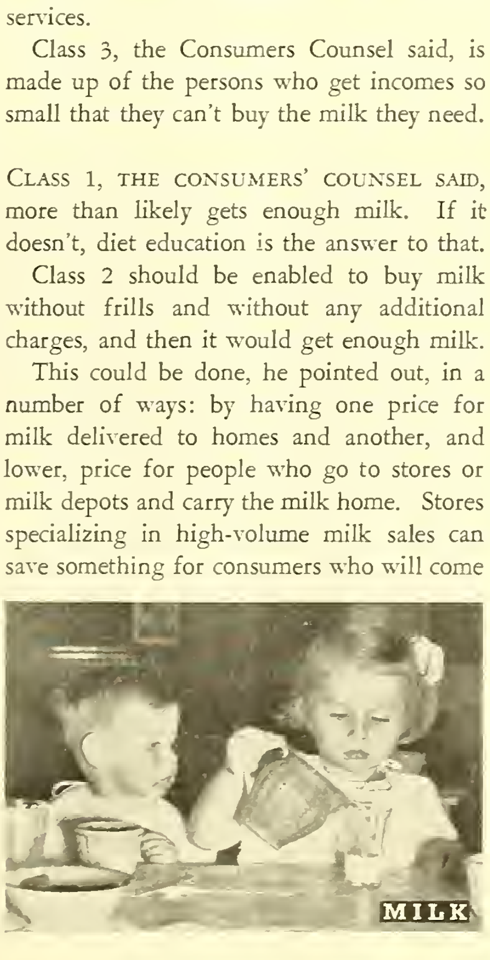
Families in Class 2 are people who have enough income to buy all the milk they *need* if they could buy milk without such added costs of delivery, charge accounts, and other services.

Class 3, the Consumers Counsel said, is made up of the persons who get incomes so small that they can't buy the milk they need.

Class 1, the consumers' counsel said, more than likely gets enough milk. If it doesn't, diet education is the answer to that.

Class 2 should be enabled to buy milk without frills and without any additional charges, and then it would get enough milk.

This could be done, he pointed out, in a number of ways: by having one price for milk delivered to homes and another, and lower, price for people who go to stores or milk depots and carry the milk home. Stores specializing in high-volume milk sales can save something for consumers who will come and get it. Another way would be to offer price reduction for quantity purchases. Milk delivered in gallon and half-gallon jugs can be sold at a cheaper rate than milk in quarts and pints.



Class 3, he indicated, needed and should get subsidies of some kind if its families are to get the milk their bodies need.

The significance of the Boston Milk Plan is that it is a step toward solution of the milk problem of these families. Under this plan, farmers are paid what is known as the "relief price" for all the milk distributed to the low-income families at the bargain prices.

This relief price right now is the same price that is paid farmers for Class 1 fluid milk, 6.8 cents a quart. That is the highest price paid farmers for milk that goes into bottles. Milk that is sold as cream or used for the manufacture of butter, cheese, and other milk products, bring farmers much lower prices.

Before milk is ready for consumers to drink, it must be pasteurized, bottled, and delivered to the milk depots. Naturally under the Boston Milk Plan, relief milk must meet all the standards required of all other fluid milk.

Arrangements for the processing, bottling, and delivery to the depots of "relief milk" have been made with the Boston dairies. All the dairies are permitted to bid on the job of processing and delivering the milk in quart bottles to each of the 100 depots. Bids were given out for each of the depots instead of for all of them together because only 2 dairies in Boston have facilities large enough to handle the whole job. By breaking down the job to be done, small dairies are enabled to get a part of this business.

A top limit on the cost of handling the milk from the farmer to the depots has been set at 2 cents a quart. Bids by the dairies in Boston ranged up to 2 cents a quart but averaged 1.4 cents. The amount of milk delivered to each depot varies from 100 quarts a day up to 4,000 quarts a day.

Roughly then, the farmers get 6.8 cents for the milk they sell for distribution to Boston's needy families. The dairies get up to 2 cents a quart.

To get the financing of the plan straight, it is necessary to go back to the prices the families pay for this milk.

Families on relief pay 5 cents a quart for their milk. Now all of this 5 cents goes to the dairy farmers for the raw milk. Then the difference between 5 cents a quart and the 6.8 cents a quart which the farmer charges for his milk is paid by the Department of Agriculture out of a portion of the tariff receipts which has been set aside by Congress to be used to help farmers to move surpluses off the farms.

The cost of processing the 5-cent milk sold to relief families is paid by the relief agencies in Boston.

Milk is sold to families on WPA at 7 cents a quart. Of this 7 cents, 5 cents is given to the farmers with the Department of Agriculture making up the difference between 5 cents and 6.8 cents per quart the farmer receives.

The 2 cents remaining from the 7 cents the WPA families pay goes to pay the cost of processing, bottling, and delivering the milk to the depots.

Boston's present plan is a revision and an overhauling of a plan that has been effective in Boston since October 14, 1937.

At that time the Federal Surplus Commodities Corporation entered into an agreement with the Department of Public Welfare of the State of Massachusetts. Under that agreement, the FSCC bought milk from farmers in the Boston milkshed and gave it to the Department of Public Welfare, which used funds supplied by the local city governments, to pay for the processing and bottling of the milk and its distribution to families on relief.

Before entering into the agreement, a survey showed that 45 percent of the families on relief were purchasing no milk at all. Every quart of milk given to these families, the FSCC expert reasoned, would reduce the surplus of milk in the milkshed by just that much. It wasn't a question of competing with another food, or taking a milk customer away from a dairy by giving milk away. Here were families that should have had milk but weren't getting it.

Some families, among the other 55 percent, were buying milk in various quantities but nowhere near the amount which diet experts recommend for well-balanced diets. To make sure that these families would not stop their regular purchases, every family receiving free milk had to sign an agreement. In the agreement the families promised not to reduce their milk purchases, but to use the milk they got through the relief agencies in addition to their usual milk order.

After a year of the plan's operation, the man in charge of it, testifying at a public hearing, said, "There have been but few cases of violation or breach of agreement reported."

Families with wage earners on WPA also had a chance to participate in this plan, but they were charged 2 cents a quart, the cost of handling it, while the Government assumed the cost of the raw milk.

All told, 75,000 Boston families received milk free or at a cost of 2 cents a quart bottle. Daily totals, which were 14,000 quarts at the beginning, rose until on some days they reached 120,000 quarts. On an average day, however, about 60,000 quarts were distributed.

That's the way the present Boston milk plan began. Supported in the beginning almost entirely by a Government subsidy, it is now more nearly self-supporting.

Already other cities are observing Boston's experiment in opening the milk sluice gates so more people can have milk and milk farmers can earn more money.

In Chicago, under the present Federal milk marketing agreement, there is a price known as the "relief milk price." This is the price farmers will receive for the milk that is eventually sold at special low prices to needy families. It is not so high as the fluid milk price, the top price, and it is not so low as the price paid for surplus milk which is diverted to manufacturing purposes. Theoretically it is low enough to be another step toward the practical recognition of the fact that there are different classes of milk consumers. And it is high enough to assure farmers increased returns because the greater consumption will bring into fluid use surplus milk which otherwise would be used for manufacturing purposes at lower returns to producers.

Similar relief prices are under discussion in other cities. Right now milk producers in Kansas City and St. Louis are also considering this 5-cent solution to the problem of getting milk to America's many milkless families, and provision has been made for a special "relief milk" price in the Federal-State orders for New York.

WHAT farmers get for milk depends upon what use is made of the milk. Milk that goes into bottles brings the highest prices. Milk for butter, cheese, and other manufactured products brings much lower prices. Under the new plan in Boston, there is now an in-between price for milk to be sold to relief families.

MARGARINE

Margarine Takes the Hurdles

*State and Federal laws raise economic barriers along the route from factory to dinner table for this low-cost bread spread**

NAPOLEON III, disturbed because his subjects were staying up after dark, and because they were riding trains, ordered his Minister of State to offer a large cash prize to the man who could invent a cheap butter substitute.

Not so illogical as it sounds, the offer was made to encourage the invention of an edible fat which would make up for the edible fats and oils the French were burning in their lamps after dark and using to lubricate the wheels and axles of their growing railroad industry.

Demand for night illumination and for lubricating oils in industry had reduced the supply of edible fats and oils. Butter, almost alone, had to meet France's need for fat as food. Butter prices, under the stimulus of increased demand, however, were leaping out of reach of most Frenchmen.

Since fats are an indispensable part of the human diet, Napoleon III was faced with a crisis. A French chemist named Mege-Mouriez, building on the research of other chemists, answered Napoleon III's prayer. The cheap edible fat he invented was called margarine.

Mege-Mouriez's achievement came to light in 1869 when he was awarded an English patent on his method of making margarine. By 1874 margarine was in production in France. On April 12, 1874, a city ordinance announced that it was legal to sell margarine in Paris, provided it was not sold as butter. Within a few years it was being made in England, Germany, and the United States. Napoleon III and Mege-Mouriez had started something.

MARGARINE IS A PRODUCT WHICH IS processed in factories but whose antecedents are chiefly farm products. The 385 million pounds of margarine produced in the United States last year had a value, at retail prices of 66 million dollars. To feed this 66 million dollar industry, margarine makers used 20 million pounds of animal fats which were byproducts of the cattle and hogs that packers bought from American ranchers and farmers. An even more important American source of margarine ingredients is the cotton grower. From him come the cotton seeds from which are pressed oil that is eventually worked into margarine. Altogether, in 1938, there were used in the manufacture of margarine 143 million pounds of cottonseed oil, 40 million pounds of soybean oil (soybean oil moved ahead of cottonseed oil as a margarine ingredient in July 1939), 3½ million pounds of peanut oil, and a half million pounds of corn oil. To this were added 106 million pounds of imported fats and oils; cocoanut, palm, sesame, rape, and ouri couri oils, exotic products of the Far East, the South Seas, and the tropics. These domestically produced and imported fats and oils, processed and churned, added up to the 3 pounds of margarine which the statistical "average person" in the United States consumed in 1938.

That's one side of the story. The other side of the story comes from the butter industry. In 1938 it produced more than 2 billion pounds of butter with a total retail value of some 800 million dollars. In the great mid-western region butter making is a major activity. And butter is a product of dairy farms located in every State in the Union. Some of these dairy farmers would like to limit, in one way or another, the sale of margarine, since they say it competes unfairly with butter. Without measuring the competition, a comparison of butter consumption with margarine is in order. Against the 3-pound average per capita consumption of margarine in 1938, there was an average per capita consumption of 17 pounds of butter.

Margarine makers, and the people who raise the products which go into margarine, understandably enough, do not want the sale or consumption of margarine limited.

The Agricultural Adjustment Administration, without in any way taking up arms for or against either side, is administering a farm program which is designed to benefit all farmers concerned with producing the raw materials of both foods: producers of milk and butter, and producers of fats and oils; the cotton producers, the peanut growers, the corn producers, and the livestock producers.

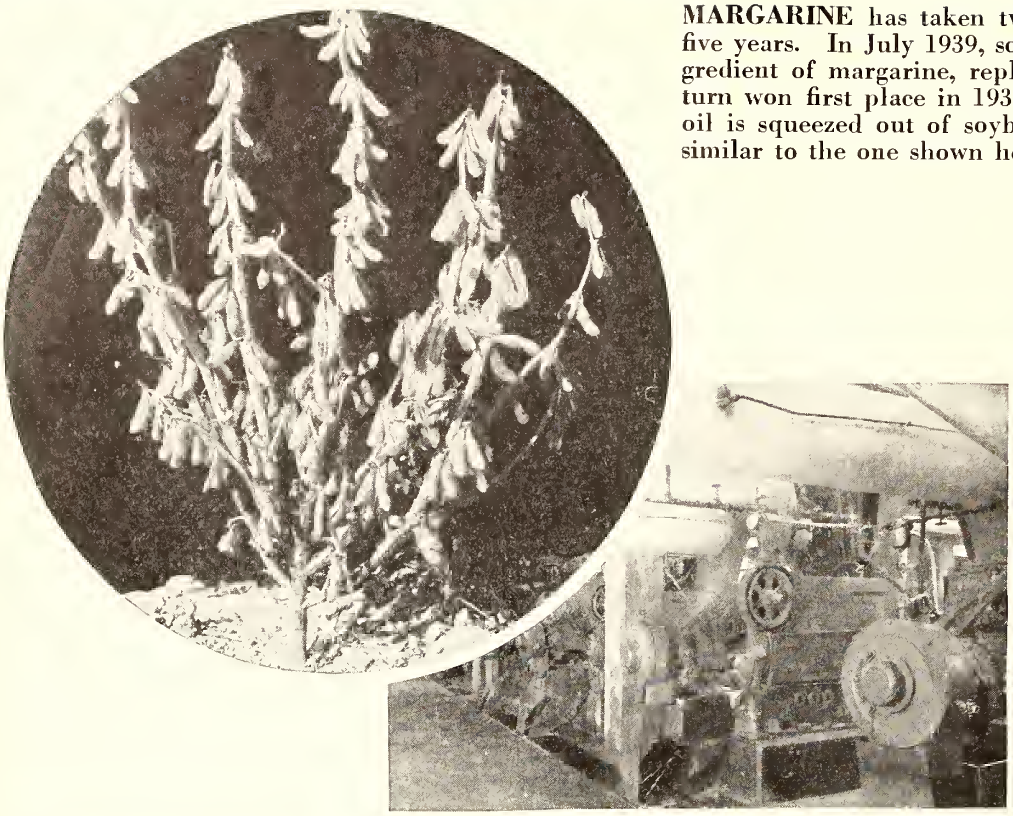
Pressure in the States has tipped the scales, by means of laws, sometimes in the direction of one group of producers, and sometimes in another direction. Of the laws of this type, one group is called the "margarine laws."

A CHAPTER IN A RECENT SPECIAL REPORT to the Secretary of Agriculture on Barriers to Internal Trade in Farm Products describes margarine laws and their effects.

"Almost from the time of its introduction into this country in the early 1870's, Federal and State taxes and regulatory laws have, with varying success, been applied to the

---

**This is the fifth of a series of Consumers' Guide articles based upon material contained in the publication, "Barriers to Internal Trade in Farm Products," a Special Report recently made to the Secretary of Agriculture by the Bureau of Agricultural Economics. Earlier chapters appeared in the March 13, March 27, May 1, and May 15 issues of the Consumers' Guide. A few free copies of the complete report may be had by writing to the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C.*



MARGARINE has taken two important turns in the last five years. In July 1939, soybean oil became the chief ingredient of margarine, replacing cottonseed oil, which in turn won first place in 1937 from cocoanut oil. Soybean oil is squeezed out of soybeans (circle) by an apparatus similar to the one shown here.

manufacture and sale of margarine (oleomargarine)," the chapter begins. "Irrespective of whether or not such was its purpose, the actual effect of much of this legislation has been to raise appreciable barriers to interstate trade in butter substitutes."

Sometimes there are perfectly good reasons, or at least reasons that most people accept as perfectly good, for a trade barrier. However, there are two questionable effects of some trade barriers. One is to deny consumers the opportunity to make choices when they go marketing. The other is to penalize certain producers in favor of other producers.

In the case of margarine, these laws raise the price of the product to consumers and place restrictions on the marketing of margarine ingredients by the farmers who produce them.

THE FEDERAL GOVERNMENT, IT SHOULD BE noted, places restrictions against the use of butter substitutes in its institutions. Soldiers in the United States Army may not be served these products except when they are cooked with food. This is true for war veterans getting care in Veterans' Hospitals and for patients in the hospitals operated by the Interior Department.

Tracking along after these Federal precedents, 20 States forbid, in one way or another, the use of oleomargarine in State-supported or State-aided charitable, penal, or other institutions.

COTTONSEED, a 200 million dollar byproduct of the South's cotton fields, which has previously been cooked into cottonseed cake is then pressed in an apparatus like the one to the left, until it yields its oil.

THE oil, whichever kind is used, is blended with sour milk which has been pasteurized in tanks like these pictured here. The mixture is then churned, cooled, and worked between fluted wooden rollers.

Many States require restaurants and boarding houses serving oleomargarine to post conspicuous signs announcing that margarine is dished out to patrons. Missouri and Arkansas require them to label the plates containing it, "oleomargarine."

More than half the States have laws requiring margarine to be labeled and packaged so that it won't be confused with butter.

The sale of yellow margarine—colored like butter—is prohibited altogether in 32 States.

Every State in the Union except Arizona has special laws applying to margarine, in addition to the regulations which would ordinarily apply to it under the Food and Drug laws.

In addition to these laws, there are also the license and tax regulations which apply to margarine.

The manufacturer of margarine is taxed by the Federal Government for the privilege of making this commodity. His tax is $600 a year. For each pound of uncolored (that is, white) margarine he makes, he pays a tax of one-fourth of a cent. In addition, for each pound of yellow margarine he makes, he must pay a tax of 10 cents.

Wholesalers who sell margarine must pay the Federal Government a tax of $480 a year, for the privilege of dealing in yellow margarine.

Retailers who sell white, that is uncolored, margarine must pay an annual tax of $6 to the Federal Government. To sell white and yellow margarine they must pay a tax of $48 a year.

Two taxes must be paid on margarine that is imported into the United States. The first is the tariff duty which amounts to 14 cents a pound. Then, after its admission fee has been paid, there is a tax of 15 cents a pound for an internal revenue stamp which is affixed to each package of margarine sold in this country. Imports of margarine are practically nil.

In 11 States a manufacturer must have a State license as well as a Federal license to manufacture margarine. This license ranges in cost from $1 in Minnesota to $1,000 in Wisconsin, Oklahoma, and North Carolina.

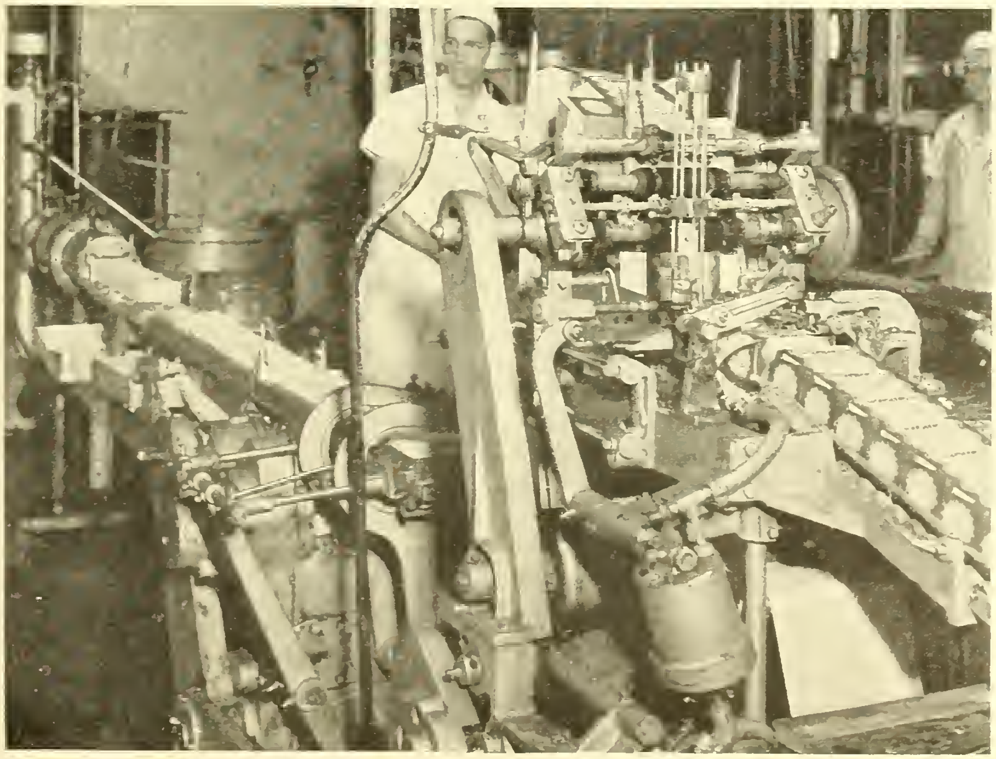
Wholesalers of margarine must pay anywhere from $1 to $1,000 annually to the States in which they hope to sell this product.

Montana assesses retailers $400 a year for the privilege of selling margarine. Thirteen other States charge their retailers anywhere from $1 to $100 a year for the privilege of putting margarine into their customers' market baskets.

Six States track down boarding house and restaurant operators to tax them for the privilege of serving margarine. The taxes range from $2 to $25 a year.

Bakers in 3 States have to pay anywhere from $1 to $10 a year for mixing margarine into their batter.

AUTOMATIC machinery compresses the margarine into a loaf, slices it into the desired weights, wraps it up, and delivers it finally ready for shipment at the end of the production line.



Margarine also has produced something else by way of novelty: licensed consumers. Wisconsin, in perhaps the most searching margarine law of them all, hunts out consumers who buy margarine in interstate commerce, and taxes them $1 a year.

Those are the State taxes which corporations and individuals must pay for making, handling, selling, or *using* margarine.

In addition, half the States place excise taxes of one kind or another on margarine.

These taxes, depending upon the State, are intended to accomplish one of 4 purposes:

1. To protect butter from the competition of any kind of butter substitute.
2. To protect margarine made from fats and oils produced within that State from competition with margarines made from fats and oils produced in other States or abroad.
3. To protect margarine produced from American fats and oils from margarines made from foreign fats and oils.
4. To prevent disguising margarine as butter.

Taking up the cudgels for butter, Wisconsin and Washington put a tax of 15 cents a pound on all margarine sold within their borders. Altogether 9 States tax margarine without reference to what it is made of. In addition to Wisconsin and Washington, these States are Idaho, Iowa, Oklahoma, North and South Dakota, Utah, and Tennessee.

Three cattle-producing States, Wyoming, Missouri, and Nebraska, write their margarine tax laws so that margarine, to be sold inside their borders, must be made chiefly of animal fat.

Discriminating between domestic and foreign ingredients, 14 States tax margarine if it contains oils and fats of foreign origin, but make it tax-immune if it is made of any one of a list of oils or fats either made in the United States or made in the State concerned. Thus in 7 States margarine is tax-free if it contains minimum amounts of certain animal fats, neutral lard, corn oil, cottonseed oil, peanut oil, soybean oil, or milk fat.

First effects of the burst of important chemical inventions in the last century, which included margarine, were not entirely happy. "Chemical inventiveness outdistanced business ethics," one authority, basing his statement on studies made by the Department of Agriculture in the 1880's, puts it, "and many newly developed substitute articles were used for adulteration and sold as the genuine article. Milk, butter, cheese, flour, tea, coffee, honey, and olive oil make only a part of a long list of products adulterated at that time."

Margarine, colored yellow to resemble butter, was in the early years of its manufacture in the United States palmed off as butter.

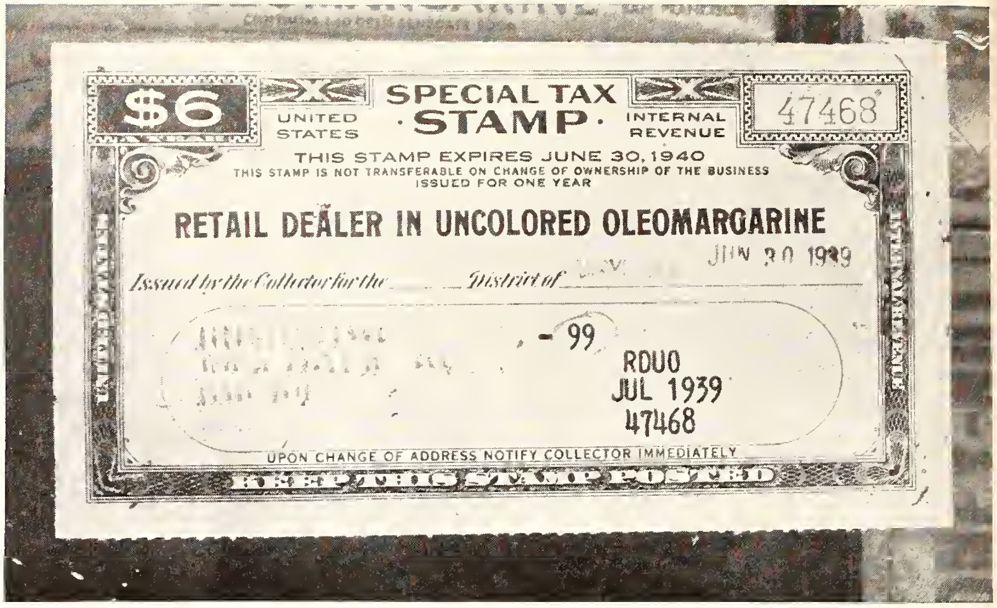
That was fraud. This fraudulent sale of margarine as butter got mixed up in a political war that was waged in the 1880's. Resentment by farmers against the great packing companies of the day was high. Stewing in the political pot at the time were laws to regulate big corporations, laws to regulate the railroads, and laws which were meant to even up the struggle between farmers and city corporations, between small and big businesses.

Margarine, as a product manufactured by the great packing houses in a period when they were most unloved, started out with 2 strikes on it. The fact that it competed with butter, which at the time was made almost solely on a small scale by practically every American farmer, made things worse.

Laws fell thick and fast on margarine. Ostensibly their object was to make it impossible to sell margarine as butter. Hence the present day distinction in the tax laws between colored and uncolored margarine, with the heavier, prohibitive tax on the colored variety.

In two-thirds of the States today, there are laws which forbid the sale of colored margarine. But, where margarine is used in place of butter, people want it to look like butter. So margarine makers sell, with their margarine, a little packet of coloring matter which the consumer himself can use to color the product. Here no one is being fooled.

The Federal Oleomargarine Act, passed in 1886, was one of the first to offer consumers any protection against misbranding and adulteration of a food. Along with its tax regulations, the law forbade false and deceptive labels, made the sale of deleterious margarine illegal, and required all margarine to be labeled in letters three-quarters of an inch high with the name, "Oleomargarine."



$6

UNITED STATES

SPECIAL TAX STAMP

INTERNAL REVENUE

47468

THIS STAMP EXPIRES JUNE 30, 1940

THIS STAMP IS NOT TRANSFERABLE ON CHANGE OF OWNERSHIP OF THE BUSINESS

ISSUED FOR ONE YEAR

RETAIL DEALER IN UNCOLORED OLEOMARGARINE

JUN 30 1939

Issued by the Collector for the ______ *District of* ______

-99

RDUO
JUL 1939
47468

UPON CHANGE OF ADDRESS NOTIFY COLLECTOR IMMEDIATELY

KEEP THIS STAMP POSTED

RETAILERS who sell margarine must have a Federal license. So must wholesalers who sell it, and the manufacturers who make it. States add taxes of their own, and in one State, Wisconsin, consumers who buy margarine brought into the State must also obtain a license.

TODAY CONSUMERS RELY CHIEFLY ON 2 Government agencies for protection against unwholesome or misbranded margarine. If it contains fats derived from meat animals margarine must be manufactured in plants supervised and inspected by the Federal Meat Inspection Service. This means that every ingredient has been inspected and that these margarines have been manufactured under the supervision of a Federal meat inspector. Labels on this type of margarine, too, must be O. K.'d by the Meat Inspection Service before they may be used. Margarine prepared under the supervision of the Federal Meat Inspection Service may be recognized by its mark, "U. S. Inspected and Passed by the Department of Agriculture," which appears on the container.

Margarines that do not contain fat from meat animals come under the provisions of the Federal Food, Drug, and Cosmetic Act.

Margarine, under regulations issued by both the Meat Inspection Service and the Food and Drug Administration, must contain at least 80 percent fat. This corresponds to the legal provision requiring that butter contain at least 80 percent butterfat.

THOSE ARE THE MARGARINE LAWS. THE purposes of margarine tax laws, however, go beyond the prevention of fraud. It isn't necessary to hunt far to find out what the additional purposes are. For example, says the Special Report to the Secretary of Agriculture: "When the Washington tax of 15 cents per pound was carried to the Supreme Court, the sponsors of the Act candidly stated their purpose was to help the butter industry . . ."

That's frank enough, and it raises clearly a number of questions, which, while they can't be settled without careful study by consumers and producers, nevertheless are worth looking into.

First, does a tax on a butter substitute actually help butter producers?

Second, should the States levy taxes which are in effect tariffs?

Third, is there any reason why people shouldn't eat margarine if they want to?

Question one is answered by the Special Report to the Secretary of Agriculture in this way: "State legislation regarding margarine cannot be expected to give appreciable aid to dairy farmers. In all probability, even national legislation of a prohibitive character would be of little help . . . The Agricultural Adjustment Administration says, 'The Government never before has prohibited the use of any safe and noninjurious food product. Even if it should do so now, and if all consumption of oleomargarine were prohibited and persons formerly using margarine turned to butter, the maximum increase in the price of butter probably would be less than 2 cents a pound. And since many oleo users might not turn to butter, the actual increase might be less than a cent a pound.' "

From 1921 to 1934 a pound of oleomargarine sold at retail for somewhere between 12 and 19 cents less than a pound of butter.

NOW, OBSERVERS SAY, MANY OF THE PEOPLE who buy margarine buy it because it costs less than butter. Raise the price of margarine and only a few of these people will turn to butter. Instead they will turn to other fats, to lard, to cottonseed oil, and similar products for cooking purposes; and to jams, jellies, mayonnaise, and other foods as bread spreads.

Going on, the experts explain, butter prices cannot be raised by a law passed in a single State. Take margarine away from the people in Wisconsin (a dairy State where this has practically been accomplished) and this action cannot raise the price of butter one cent above the national price so long as there is interstate commerce in butter.

But even if such laws were effective in their purposes, the Special Report to the Secretary of Agriculture says, in effect, States might consider other effects which such laws may have. In 1935, Wisconsin passed its stringent margarine tax law. Immediately Alabama, whose cottonseed oil market was hit by the law, protested through its Governor. So did the Louisiana State Commissioner of Agriculture, and the Tennessee Federation of Labor, and the Arkansas State Legislature.

In a bitter retaliatory mood a newspaper speaking for a group of cotton growers said, "We are Wisconsin's best customers for butter, cheese, condensed milk, farm implements, farm light plants, plumbing supplies, and road-building machinery. Without our patronage she would indeed be in a sad plight. She has invited such a calamity on herself. She has chosen to wall herself in. Let us see how she likes it."

Actually, the Report continues, no great counter measures were taken. But the law establishes a precedent, the Special Report points out. Other laws might very well be proposed that would do to butter in behalf of other products what Wisconsin is trying to do to margarine in behalf of butter. Already laws are in effect which try to block the sale of out-of-State products by laying State excise taxes on them.

Another sentiment, too, has been detected. California's citizens, in a State referendum, repealed an excise tax on margarine, and in Washington State a law discriminating against margarine was similarly repealed. In all, 9 prohibitive margarine laws have been repealed by State referenda.

And this year, the signs indicate a definite trend. Under the light of publicity on the effects of trade barriers, the legislatures of Oregon, Vermont, and Minnesota turned down a proposal to enact margarine taxes. Iowa voted "no" on a proposal to increase the present tax.

Every now and then in the margarine-butter controversy, the argument pops up: Well, people shouldn't eat margarine anyhow, it isn't healthy.

Margarine and butter are both predominantly fats. Under Federal laws butter must contain at least 80 percent butterfat, and under Federal regulations margarine must contain 80 percent fat.

Now fats are high-calorie foods which are important in the diet because they are a rich source of energy. They rank above any other kind of food in fuel or energy value. A pound of margarine, or butter, for example, furnishes about 3,400 calories.

For energy purposes, there is little to choose between the various kinds of pure fat. They are all, more or less, equally digestible, and equally rich in fuel value.

However, since neither butter nor margarine is all fat, there are differences between them.

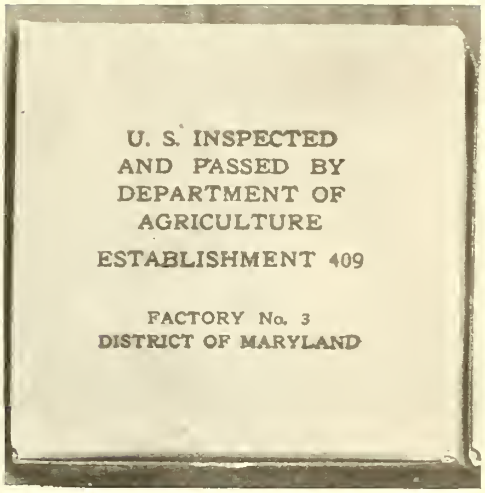
Apart from the fact that people eat butter because they like it, its consistency is desirable as a bread spread. Further, butter contains 2 important vitamins, A and D. The amount of these vitamins in butter depends upon the diet of the cows that produced the milk from which the butter was made. Thus the Vitamin-A content of butter may range all the way from about 1,400 International Units per pound up to 27,000 International Units per pound. The Vitamin-D content of the butter depends upon how much sun and also on the kind of food the cows get.

Margarine's value as a source of vitamins depends upon its ingredients. Animal-fat margarines containing a substantial proportion of oleo oil may have some Vitamin-A value. Under a ruling of the Meat Inspection Service animal-fat margarines are not permitted to be fortified with vitamins.

Margarines churned in whole milk, whether made from animal or vegetable fats, have such Vitamin-A value as the milk contributes.

Vegetable oils used in margarine manufacture do not contain Vitamins A and D. However, manufacturers of some vegetable margarines fortify their products with vitamin concentrates.

A pound of the fortified margarine provides at least 7,500 International Units of Vitamin A, the amount in a pound of so-called "average" butter. Such margarine also contains some Vitamin D. To find out whether or not a margarine is fortified, read the label.



THE Federal Meat Inspection Service inspects the ingredients and supervises the manufacture of margarine made from animal fats before it is placed on the market if the establishment making it sells outside the State. There is no such factory inspection for margarine made from vegetable fats. Instead it comes under the jurisdiction of State and Federal food and margarine laws after it leaves the factory.

Obviously, if butter and margarine were the only sources of these vitamins, either butter or the fortified vegetable margarines would be essential in the diet.

Actually, however, no one expects either butter or margarine to meet his day's needs for Vitamins A and D.

Freedom from the ailments which come from deficiencies of these two vitamins cannot be assured whether you eat margarine or butter, or both. Your state of nutrition is determined by your entire diet. The best safeguard is a well-rounded diet.

IF, says Section 403 (d) of the Federal Food, Drug, and Cosmetic Act, "its container is so made, formed, or filled as to be misleading," then, "a food shall be deemed to be misbranded." That entitles Section 403 (d) to an honored place in the Consumers' Bill of Rights.

Taffy, pretzels, and celery seed were among the first commodities to be caught inside deceptive containers by the Federal Food and Drug Administration.

In Hoboken, New Jersey, 125 packages of pretzels, the product of a Philadelphia bakery, were found nestling in sealed paper bags inside cardboard boxes which could have held many more pretzels than they did hold. The pretzel baker claimed that pretzels had to be packed loosely so they wouldn't break. Official observers reported, however, that even admitting that pretzels need a lot of room, the packages seized were still too roomy for the pretzels they contained.

Salt water taffy was seized while it was on its way from New York to New Haven. Like the pretzels, the taffy was packed in boxes much too large for the contents.

Celery seed was picked up in Baltimore after it arrived in town from Brooklyn, New York. It was packed in 75 dozen half-ounce packages which were only one-third filled.

Even though the Food and Drug Administration is hard at work driving slackfilled packages of food (drugs and cosmetics, too) out of interstate commerce, consumers can't close their eyes and stop reading labels yet.

What's in America's Sugar Bowl

Millions of tons of sugar sweeten America's diet each year. Here we explore where it comes from and what it is

BRING UP your grocer some morning and ask him to send you five pounds of carbon, hydrogen, and oxygen atoms, well-mixed, and compounded into something edible and sweet. If he is as smart as you are in remembering your high school chemistry, this won't stump him in the least. Soon will come the delivery boy bearing a bag of sugar.

Give the order to some laboratory chemist, and you might get any one of a hundred different products, all called some kind of sugar, but as different from each other as a file of fingerprints.

Sugars there are aplenty, thanks not only to nature, but also to the ingenuity of the men and women who work with test tubes. Sucrose that comes from cane and beets and from maple sap, everyone knows. Dextrose from corn starch is becoming increasingly familiar. But other foods can be made to yield their sugars, too. From milk comes lactose. From various types of berries comes mannose. From starchy cereals comes maltose. Scores of other sugars are beguiled from their hiding places by the laboratory G-men—all of them with different chemical make-ups, and different chemical properties.

To the scientist sugar is so many atoms of carbon, hydrogen, and oxygen built into a definite structure. Nature takes these atoms, shuffles and reshuffles them, and with the help of sun, wind and rain, makes sugar.

What man has learned to do is not only to extract sugar from the plants where nature has hidden it, but also to improve on nature by increasing the percentage of sugar found in the beet and in other sugar sources. Furthermore, men have learned how to split one sugar into two.

THIS THEY HAVE DONE, FOR EXAMPLE, WITH sucrose. Sucrose is a sugar with a dual personality. Given the time, the place, and the right conditions, it can be divided into 2 separate and distinct sugars chemically different from each other.

One of the simple sugars that can be derived from sucrose is dextrose. The other is a sugar whose chemical name is levulose, sometimes known as fructose.

Separating this dual personality sugar into its 2 parts is done in the laboratory by boiling sucrose in a very weak acid. When the body ingests sucrose, it performs a process similar to what the chemist does in a laboratory. No sooner does sucrose go down the alimentary canal, than waiting enzymes get to work on it to begin the splitting process. This continues throughout digestion, which results in a cleavage into dextrose and levulose. These sugars are carried to the liver, but what happens next is a matter on which experts do not agree. The most generally recognized fact is that the sugars are stored in the liver as glycogen, to be used as needed by the body for energy. The story is the same for the simple sugar, dextrose, which also is transformed into glycogen and stored in the liver.

NO MATTER HOW FAR BACK YOU EXPLORE into the genealogy of the sugar family, sugarcane appears to be the patriarch of them all. Its use is as primeval as the African bush, and as modern as television. It gets recognition in the Old Testament. There is an ancient Indian legend concerning its origin. The Crusaders are credited with bringing it back with them from their travels. Today it is cultivated for its sweet juice in primitive Melanesia and in many other places, while in other parts of the world a great industry has been built up in its name.

NOT SO ANCIENT BUT ALMOST AS GLAMORous is the history of the sugar beet. When Napoleon had embarked on his wars of conquest, French ports were cut off from their tropical sources of cane sugar. Frantic French scientists probed for substitutes in apples, pears, plums, quinces, walnuts, and chestnuts. Their luck was poor until one Benjamin Delessert—following upon previous experiments of 2 Germans, Marggraf and Achard—investigated the beet, and from it produced crystallized sugar. To Delessert went Napoleon's Cross of Honor.

That was more than a century ago. Since then the sugar beet has lived a life divided between laboratory, field, and factory. Scientists have increased from 5 to 20 percent its sugar content, perfected the process of extracting sucrose from it, and the sugar beet industry has grown into great corporate magnitude. After a few false starts, the industry, under Government protection, took hold in the United States, and today about seventy thousand American farms look to the sugar beet as a profitable crop.

A POST-WAR BABY IN THE SUGAR FAMILY but no longer in the wobbly stage, dextrose is younger by far than sucrose. It was not until the 20's that researchers in the National Bureau of Standards, in cooperation with chemists in private laboratories, succeeded in making refined crystallized dextrose from corn. There followed several years of perfection of the process. Only in recent years has the industry begun to market refined dextrose in large quantities.

Some researchers hope that corn sugar—today not a top product in the whole corn industry—may some day work itself up to be one of corn's major byproducts. Its entrance on the sugar scene is recent, and dextrose manufacturers have refrained from making their production figures public. Outsiders guess that between 200 and 250 million pounds of dextrose flow out of corn sugar refineries each year.

(The Census of Manufactures reports the production of 234,000 tons of corn sugar in 1937, but this includes dextrose in its unrefined state as well as the refined product.)

Corn is the principal commercial source for dextrose in this country, but it can be made in the laboratory from any plant containing starch. In some countries abroad, dextrose is manufactured from potatoes.

Although long used for special dietary purposes and as an infant food, refined corn sugar—or dextrose—today is used mostly in the manufacture of food products, such as canning, baking, and candy making. Very often dextrose and sucrose are combined.

Experts on sugar seem to agree that dextrose is less sweet than sucrose, but how much difference in sweetness there is between them is not agreed on.

Mention glucose to the ordinary consumer and he will probably think of corn syrup. Chemists in the laboratory, however, use the word glucose as merely another name for dextrose.

SUGAR THAT CONSUMERS USE TO SWEETEN their coffee or tea and for other table use is today most often refined cane sugar or refined beet sugar or just plain "sugar," as you would call it over the breakfast table. And, of course, cane and beet sugar have long been mainstays, too, in making ice cream, bakery products, beverages, candy, dairy products, confectionery, flavoring extracts and syrups, and so on.

Into the Nation's sugar bowl last year poured more than 6 million tons of refined cane and beet sugar. Some of these tons were routed to consumer kitchens. A smaller part went into candy factories, bakeries, ice cream plants, and other places that make sweets and even medicines. Still other tons were held in warehouses to be marketed later.

From our island possessions of Puerto Rico and the Virgin Islands, from the Territory of Hawaii, and from the Philippines came enough cane sugar to fill the sugar bowl four-tenths full.

Cuba added another three-tenths, while other foreign countries added a nominal amount.

Cane sugar produced in Florida and Louisiana raised the contents of the sugar bowl to the three-quarter mark.

Sugar from beets grown in 22 States from Ohio west to the Pacific coast brought the level to the top of the bowl.

CONGRESS FOR 6 YEARS HAS DECLARED HOW the national sugar bowl was to be filled with cane and beet sugars. It has told the Secretary of Agriculture what share of the bowl was to be allotted to American sugar growers, and what share to producers abroad. And it has ordered the Secretary to decide how much sugar was to be poured into the bowl each year.

By such action, Congress wanted to do 2 things. First, it wanted to maintain sugar prices at equitable levels and barricade them against too sudden ups and downs. And, second, it wanted to be sure that American sugar growers were getting a fair share of consumers' sugar dollars.

Under the present law, the Secretary of Agriculture in December of each year decided what the size of the sugar bowl was to be in the following year. He did this by checking on supplies, by measuring prospective consumer demand for sugar, and by doing other things which Congress said should be done before any sugar quotas may be announced.

Today parts of this law are suspended. They are suspended because an emergency situation in sugar developed. Newspaper readers know partly why this happened. In the early part of September, when the overseas cables brought the news of another European war, sugar also jumped into the

THE sugar beet is scooped up from the earth, washed, sliced, and sent through a series of refining processes that yield the pure sucrose. For a century this lowly vegetable has been a major source of sugar. Seventy thousand American farmers look to it today for their chief source of income.

headlines. Housewives, remembering their experiences after the last World War, became unnecessarily alarmed that a sugar shortage was imminent. They bought far more than their normal purchases. As a result some temporary shortages occurred. At the same time a great deal of speculative activity was present in the raw sugar market, and prices advanced rapidly. On September 11, the President by executive order, removed the quota barriers. In effect, he told producers in mainland United States, in Hawaii, in Puerto Rico, and in the Virgin Islands that they were free to send as much sugar to our consumer markets as they desired. Producers in Cuba and in other foreign areas were also free to send in as much sugar as they wanted to so long as they paid duties imposed on foreign sugar imports. That apparently served to reassure alarmed consumers. Since then raw sugar prices have dropped nearly to pre-war levels, but prices consumers pay for sugar had not moved back to the same extent when this was written.

Getting the cane and beet to give up their store of sucrose, and manufacturing dextrose from the corn kernel are complicated tricks. Corralling the sugar is only half the job; it takes a chemist's ingenuity and a technician's skill to refine the raw product to pure sucrose or dextrose, as the case may be.

Sugar cane juice goes through 2 separate processes before it becomes crystallized sugar. Cane stalks are first run between tremendous crushers and ground into a mass of pulp. The juice, obtained from this process of crushing, is heated, passed through a series of settling tanks to remove impurities, then dispatched to vacuum evaporators to be concentrated into a thick brown syrup, about one-third moisture. Then comes another session in vacuum pans, and the syrup is dumped into whirling centrifugal machines which separate the raw brown sugar from the molasses byproduct. That ends chapter one in the life of a pound of cane sugar.

Chapter 2 begins in the refinery which cleans the sugar, makes it white, and leaves a product almost 100 percent pure sucrose. The raw sugar is "washed" with a fine spray of water under pressure, then melted by adding hot water. The resulting liquor goes through a series of tanks for further cleaning and through filters to remove impurities. The liquor, now purified, is reconverted into crystal form, put through another treatment in centrifugal machines, and finally dried and graded according to the size of the crystals.

Beets go through a somewhat similar processing before the final yield of pure white sucrose is surrendered. The beets are washed and scrubbed. Then follows a precipitate trip to the slicer, where they exit looking like so many "shoestring" potatoes. Now comes another bath in a diffusion tank where hot water soaks the sugar from the beets, forming a juice which is carried along into a purifying tank, while what is left of the beets is sidetracked as a useful byproduct for feeding animals. A purification process follows and the cleansed juice goes into a filter press, then into a series of evaporators which reduce the thin juice to a thick syrup—now 55 percent pure sugar. The clear, sparkling liquor is channeled into a vacuum pan where the liquid is boiled to sugar crystals. From here, it goes into centrifugal machines which separate the almost-pure sucrose from the syrup, and after a drying and grading process, the sugar is ready for shipment.

Manufacturing the dextrose from the corn kernel requires all of a chemist's resources and skill. Before anything can be done, the kernel germ and endosperm must come to the parting of the ways. This is accomplished by a process of soaking and rupturing the kernel. With the germ removed, the remainder of the kernel is ground between millstones, and the starch and gluten separated from the fiber and hull of the kernel. Another process separates the starch and the first victory toward capturing the pure dextrose is chalked up.

Now begins a bit of mechanical digestion—pulling the starch through a process broadly similar to the transformation it gets in the human digestive system. It is pumped into big tanks, and soaked in dilute hydrochloric acid, under pressure and at a set temperature. A liquor then emerges. When refined, filtered, and evaporated this is corn syrup. A short period more of this treatment and you have corn sugar 70 to 80 percent pure dextrose. These are at best only the rank and file corn sugars. To get the almost pure dextrose, corn syrup must be filtered and evaporated, then crystallized. After several days of crystallizing, into the centrifugals it goes, just as the syrup from cane and beets goes into the whirling tanks to divide the molasses from the crystals. In practically no time, the 2-mile-a-minute centrifugals get rid of the corn "molasses" and leave a white refined corn sugar from 99.5 to 99.8 percent pure dextrose ready for whatever use to which it is to be put. Refined corn sugar is also sold in a hydrated form containing about 9 percent water.

NEWCOMER on the sugar scene is dextrose. Hidden in the corn kernel, it is a sugar that today is used chiefly in sweetening commercially manufactured pastries, ice cream, candy, and other products.

Draw Your Own Cost-of-Living Charts

FOUR CONSUMERS were in a huddle. Something was puzzling one of them.

"Every time I hear people say that war is going to make prices go up, I wonder is that such a bad thing, after all?" mused Consumer No. 1.

"What makes you think the country might be better off if prices went up?" asked the Expert, kibitzing this consumer conversation.

"Because when prices go up, incomes go up, too. Don't they?" Consumer No. 1 replied.

"But do all incomes?" queried the Expert.

"Not mine," said No. 2.

"Nor mine," said No. 3.

"These two consumers seem to disagree," observed the Expert. "If I may be so bold, would you mind telling me why you are so sure your incomes will not go up if prices go up?"

"Because," No. 2 answered, "we earn salaries, and salaries usually go up more slowly than prices."

"There's something in that," mused the Expert.

"And believe me," added No. 3, "it makes a lot of difference how fast my salary goes up. If prices jump up first, I'll be in a fix."

"I should think it would make a lot of difference to factory workers, too," observed No. 4, "if prices jumped up before wages did."

"But what about all the stores that sell?" asked No. 1. "If they get more for their goods, they'll spend more."

"If they can get people to pay higher prices," the Expert interjected.

"But you have to, if it's something you need," No. 1 remarked.

"Come, come. You know you don't buy as much when prices are high," reproved No. 3.

"But what I meant," said No. 1, "was some people can afford to pay higher prices, and then the stores that get that money can hire more workers and pay better wages."

"You've got a point there," the Expert conceded. "*If* higher prices would mean more factories busy, and more workers employed, and better wages paid, then higher prices would be a good thing."

"That was what I was trying to say a while back," interrupted No. 1.

"Exactly," continued the Expert. "And that's what might happen now, *unless* we get going too fast and run off the track.

"Just what do you mean by that?" asked No. 2.

"Why, this," said the Expert. "If prices go up faster than consumers' incomes go up, people aren't going to be able to buy even as much as they buy now."

"Take me, for instance," offered No. 3. "I need a new pair of shoes, but if I had to pay any more for shoes than I paid last time, I couldn't afford to buy now."

"Of course there are lots of other people in the same fix you're in," added No. 4.

"Millions of people," No. 2 remarked. "They're already spending every cent they have on necessities."

"And don't forget the people who have no incomes at all except for the help they get from State and Federal governments," No. 3 reminded.

"Rising prices," remarked the Expert, "can hurt all of these people seriously, unless . . ."

"Unless what?" the four consumers chimed together.

"Unless higher prices make more jobs. If that happens, we'll all be a lot better off. But things can get into a mess, if we don't watch out."

"How do you mean?" pressed No. 1.

"Just this. A gradual rise can help to increase employment, but runaway markets will not. They'll only make things hard for us as consumers," the Expert answered.

"No buy, no sell. No sell, no make. No make, no job. Is that it?" asked No. 1.

"That's right," the Expert agreed.

"Then what we have to watch is *how much* prices go up, and *how rapidly,* and what happens to jobs and payrolls as prices rise," concluded No. 1.

"Well said," observed the Expert.

We lost out on the rest of this conversation, if it did continue. But we began gathering together some of the yardsticks that measure price changes and the direction in which prices have moved in recent years.

In this issue we publish a series of charts to show you what we found. These charts are based on studies of the cost of living, made by the Bureau of Labor Statistics. We used pre-depression living costs as the post against which to measure more recent changes: in 1933, last year, and in June of this year. In each chart, we've allowed enough space so *you* can fill in two more bars, representing costs in September and December this year. When these later figures become available, we will publish them in *Consumers' Guide*.

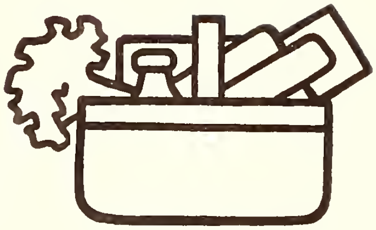
Only one-half of the picture of consumer welfare shows here: the cost of things and services consumers buy. The other half would show the amount of money flowing into consumer pockets. For want of space, that part is reserved for our next issue.

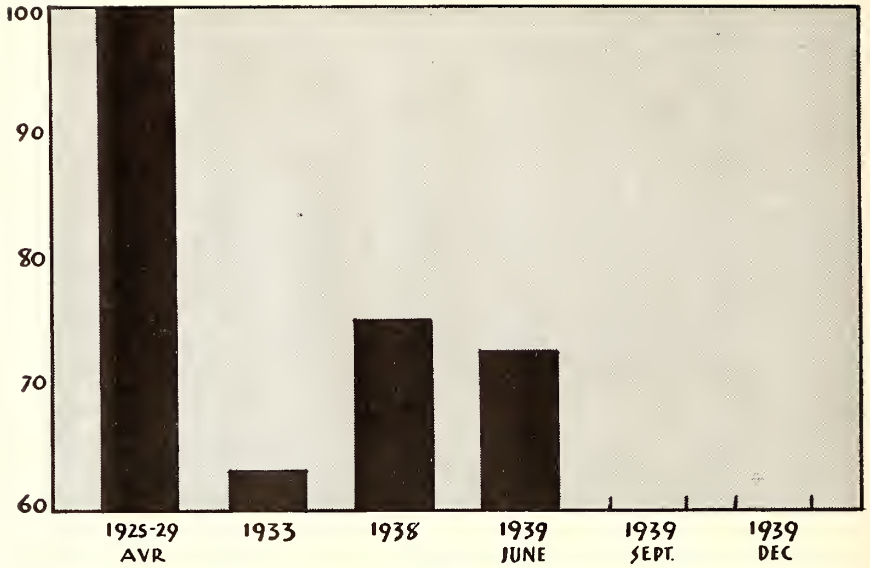
How much any individual family's total cost of living changes depends, of course, on how it divides its expenditures among the various necessities of living. In the bar at the bottom of page 15, we show how a typical wage-earner or clerical family divided its expenditures in a recent year. Out of every $100 spent, $33 went for food; $11 went for clothing; $17 went for a place to live. House furnishings took $4; fuel and light took $7; and all the other things absorbed $28. If your family divided its expenditures differently, the rate of change in living costs may hit you differently.

HERE'S HOW TO READ THE CHARTS. TAKE foods. For every $1.00 which food cost in the pre-depression years, 1925–1929, it cost 68 cents in the depression year of 1933; 75 cents last year; and 72½ cents in June of this year. What's happened since war was declared abroad will show up when figures for September and December are published.

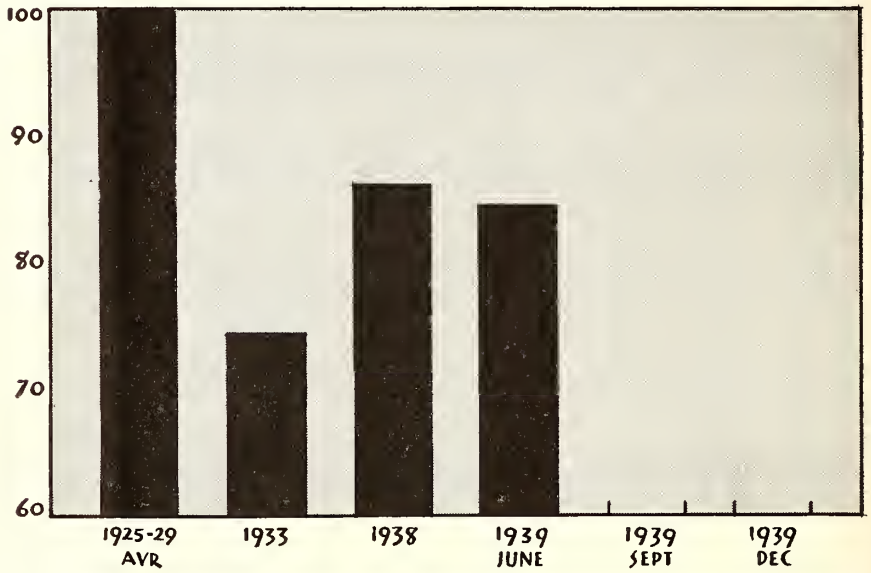
COMPARED WITH PRE-DEPRESSION LEVELS, the two main items in the cost of living which were lowest in June of this year were food and rent. Both were more than 25 percent cheaper than in 1925–1929. The two other groups that in June 1939 stood highest in relation to 1925–1929 costs were house furnishings and that large miscellaneous group called "other things." In this latter group are included such things as streetcar fares, soap, medical costs, laundry, personal care, educational costs, etc. As a whole, the cost of this group of necessities is within 3 percent of its 1925–1929 cost.

FOOD

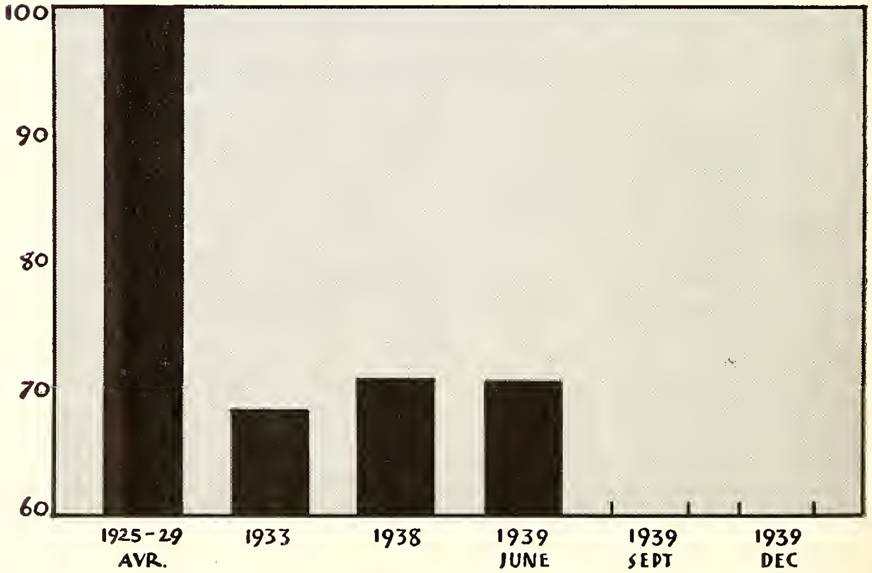




CLOTHING

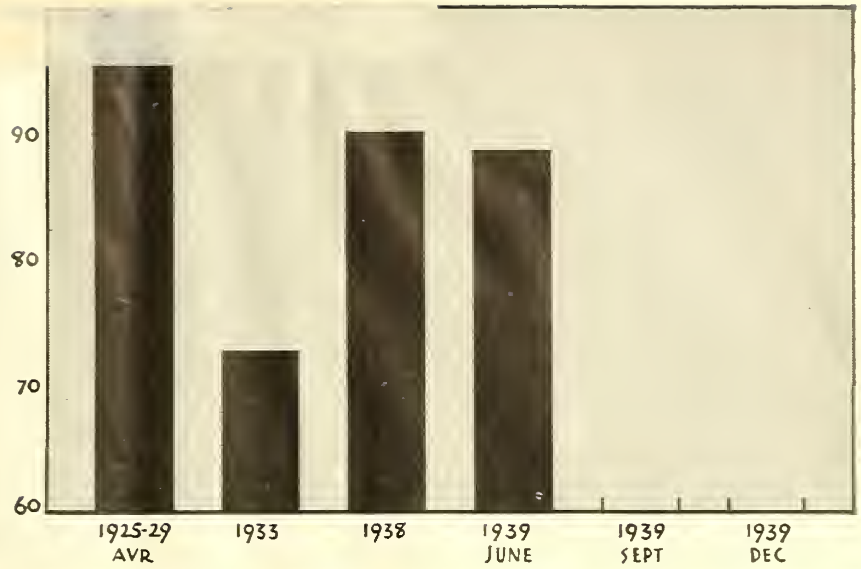


RENT

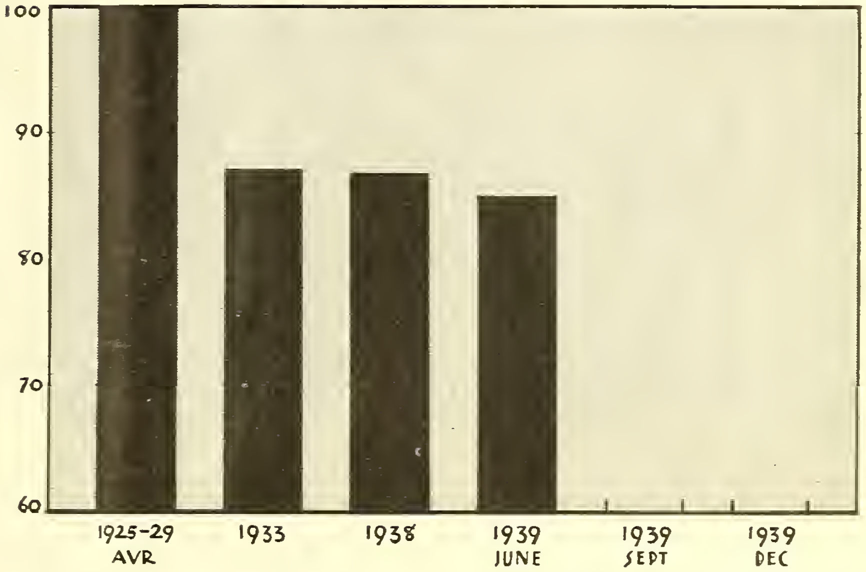


A typical worker's family divides its income this way ➡

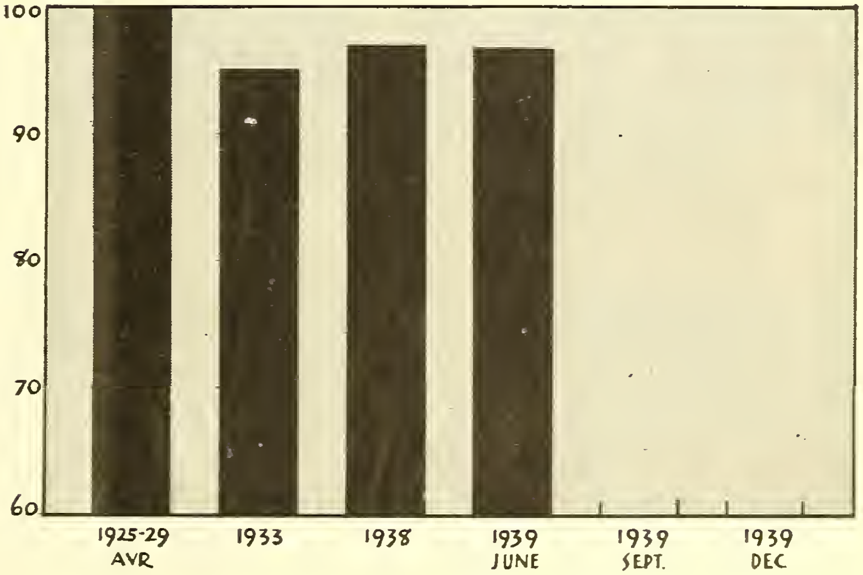
HOUSE FURNISHINGS

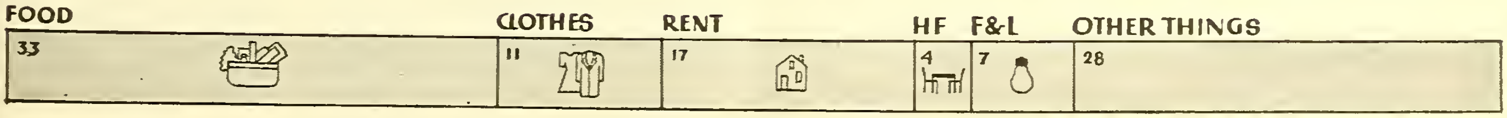


FUEL & LIGHT



OTHER THINGS





IN THIS ISSUE

NOVEMBER 1, 1939 ● VOLUME VI, NUMBER 10

Boston Drinks "Surplus" Milk . . . 3
Margarine Takes the Hurdles 5
What's in America's Sugar Bowl . . . 10
Draw Your Own Cost-of-Living Charts . 13

U. S. GOVERNMENT PRINTING OFFICE 189420

194
4
c 5

LIBRARY
RECEIVED
JAN 8 - 1945
U. S. DEPT. OF AGRICULTURE

VER NORMAL GRANARY

CONSUMERS' GUIDE

IARCH 1, 1940

STOCKINGS

QUALITY GRADES

FARMERS' SHARE

YARDSTICKS

CONSUMERS' GUIDE

MARCH 1, 1940 VOLUME VI, NUMBER 11

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

NOAH WEBSTER put 1828 in the history books by publishing in that year the first American Dictionary of the English Language.

One hundred and ten years later, in 1938, the Federal Food, Drug, and Cosmetic Act was passed and work started immediately on making another dictionary, a Consumers' Dictionary of Foods.

The law doesn't call this work dictionary-making. It simply authorizes the Secretary of Agriculture to fix and establish a reasonable standard of quality, and/or reasonable standards of fill of container, for any food, with a few exceptions, whenever such action will promote honesty and fair dealing in the interest of consumers.

Ultimately that will mean that many foods will have for the first time legal definitions and standards of identity.

To date definitions have been worked out for canned tomatoes and tomato paste, tomato catsup, and tomato juice; frozen and dried eggs, egg yolks; canned peaches, canned apricots, canned pears, and canned cherries.

Right now the Food Standards Committee of the Department, which includes 2 Department and 4 State food officials, is working on definitions for margarine, bread, and canned fruits for salad and canned fruit cocktail.

Since the definitions are made in the interest of consumers and since no one should know what that interest is better than a consumer, consumers who have any ideas on margarine, bread, or canned fruits for salad and canned fruit cocktail are invited to tell the Food Standards Committee about them. The address is: Food Standards Committee, Food and Drug Administration, U. S. Department of Agriculture, Washington, D. C.

What the Committee wants from consumers is answers to these questions:

(1) Do you know what goes into margarine or do you want the label to tell you?
(2) How bread should be defined.
(3) What belongs in canned fruits for salad and fruit cocktail?

If consumers should turn today to their dictionary of foods as it is being compiled by the Department of Agriculture, they would find this entry under canned peaches:

". . . a regulation which will promote honesty and fair dealing in the interest of consumers is hereby made and promulgated," the definition begins.

First, the regulation says, canned peaches are the food prepared from mature white or yellow freestone or clingstone peaches.

Under the regulation the canned peach label must show which varietal group is contained in the can.

Such peaches may be packed whole either peeled or unpeeled, or they may be pitted and then packed in one of the following forms; peeled or unpeeled halves, peeled quarters, slices or diced, and finally, peeled mixed pieces of irregular sizes and shapes.

Again the label must specify in just what form the peaches have been packed. They may be packed in one of 4 kinds of syrups: light, medium, heavy, or extra heavy, or in water or peach juice. In making syrup, canners may use either sucrose or a mixture of dextrose and sucrose, but the syrups they use must meet a sweetness specification laid down in the regulation.

A legend on the label must tell consumers the type of syrup or other packing liquid. The taste of canned peaches may be modified with spices, vinegar, peach pits or kernels, or with flavorings. No more than one peach pit to each 8 ounces of canned peaches may be used except in the case of whole peaches. Peach kernels may be used in all except whole peaches, but peach pits and kernels cannot be used together.

Again the label will tell the consumer the story. Where spices, vinegar, flavoring, peach pits, or peach kernels are added they must all be indicated.

Honesty and fair dealing also requires, according to the Department of Agriculture, that consumers be protected from only partly filled cans of peaches. A can of peaches must be filled with the maximum amount of peaches that the can will hold without crushing and breaking. If a can of peaches contains less than this amount of peaches, it must be labeled, "Below Standard in Fill."

Finally all canned peaches must come up to a minimum standard of quality or else carry a label describing the inferiority. Peaches may fail to measure up to this minimum standard if the pieces aren't tender enough, if they are too small or too irregular in size, if they are "gouged" in trimming or otherwise unseemly, if they are crushed, broken, or not well peeled.

Reduced to the kernel, as it were, the canned peach definition assures consumers from now on that they can look at a label on a can of peaches, and tell what kind of peaches they are buying, in what form they have been packed, in what kind of liquid they have been packed, what's been used to flavor them, whether the can is properly filled or not, and whether the peaches are above a minimum quality or not.

The law does not require that the peaches in the cans containing fruit of better than minimum quality be graded and the labels carry the grade.

A nutty formula that will come in handy for consumers who are too smart to cook by rule of thumb methods has been worked out by the Bureau of Home Economics.

It answers the bewildering question, how many nuts must you shell to get a cup of nut meats?

There are all kinds of nuts, of course, and the unshelled equivalent of a cup of nut meats varies with the nut. But here are some figures giving the equivalents for the most popular nut varieties.

A half pound of peanuts will shell out to a cup of nut meats. Slightly less than a pound of filberts gives you a level cup of filbert nut meat. An even pound of almonds will shell out to an even cup of nut meats, while it takes just a bit more than a pound of English walnuts to crack out a measuring cup of meats. Before you can get a cup of black walnut meats you have to shell about two pounds of nuts.

For more information about nuts, including recipes, consumers may write to the Superintendent of Documents, Washington, D. C., for the Bureau of Home Economics Bulletin, "Nuts and Ways to Use Them." The bulletin costs 5 cents in cash.

●

PLEASE NOTE

NO ISSUES OF CONSUMERS' GUIDE WERE PUBLISHED BETWEEN NOVEMBER 1, 1939, AND MARCH 1, 1940.

The Nation's Extra Wheat Bin

How the Ever Normal Granary machinery fills the bin that steadies wheat prices and assures bread for consumers

DURING the seven years of famine, the Bible says, in all the land of Egypt there was bread, though there was famine in other lands. In Canaan, Jacob heard the whisper that went through the ancient world.

"I have heard that there is grain in Egypt," he said to his sons. "Get you down thither, and buy for us from thence; that we may live, and not die."

It's far down the years from Joseph and his brethren today, but there's hardly a landmark on the road through the years that isn't connected in some way with bread. Check off the slogans men have shouted when they've raised their voices, or unfurled sails, or pulled up stakes for a new go at life, and you'll notice that it was bread and land they asked for, bread and peace, bread and liberty, and sometimes, just bread.

There never has been a bread shortage in the United States, and famine isn't the word for the thoughts of a man who is listening to his radio, a block from the corner grocery, one room from the smell of cooking in the kitchen.

But don't for a moment let the 1940 models of radios and autos lead you to believe that we are so far out of the realm of necessity we never give a thought to bread. In the first week of September when loudspeakers brought incessant talk of war, people in some cities went from store to store in search of sugar—very much in the manner of the 10 sons of Jacob going out of Canaan to Egypt in search of bread.

Prices and people had the jitters in that first week of the war. And while sugar had the headlines, uneasy thoughts about bread crossed people's minds too.

Despite the corner store and the cooking in the kitchen, people seriously and solemnly asked each other and the newspapers and Government agencies, is there going to be enough food?

There were answers to this question, immediate ones, by the Secretary of Agriculture and by the Consumers' Counsel of the Department of Agriculture.

The answer was and is, yes. And one of the reasons why the answer was an immediate and reassuring yes was the Ever Normal Granary. That is the modern American adaptation of the idea Joseph found in Pharaoh's dream back in Memphis, Egypt.

It is the purpose of Congress, said the law which nails up the framework of the Ever Normal Granary, to regulate interstate and foreign commerce in cotton, wheat, corn, tobacco, and rice to the extent necessary to provide an orderly, adequate, and balanced flow of such commodities . . . through storage of reserve supplies, loans, marketing quotas . . . so that farmers will get fair prices, and consumers will be assured adequate and steady supplies.

Men can spend their days weaving words into magic carpets to carry them from here to there, but unless magic carpets are hooked up to machines that carry the load, they remain no more than fragile fabrics of wishful thinking.

To implement its high purpose for farmers and consumers, therefore, Congress drew the blueprint of a machine to carry the country over the mountain tops and valleys of disorderly, inadequate or unbalanced commerce in farm products.

We will give farmers 4 sets of tools, said Congress, to implement this insurance for their own and consumers' protection. The Nation knows how much wheat it will need in an average year because it has long-time records of domestic consumption and of exports. It knows from experience, too, how much reserve it needs to insure sufficient supplies of wheat even in years of low production. The first set of tools in the national wheat program gives the individual farmer the opportunity to know how much wheat he must seed to provide his share of the national need. This is his wheat acreage allotment. But if acres yield more than average, farmers may agree among themselves not to sell the amount in excess of the normal need of the country. For this, they have a system of marketing quotas, the program's second set of tools. Also when supplies are so excessive as to glut the market and depress prices so that farmers get inadequate returns for their labor, farmers may use a system of loans. That is the third set of tools. And to guard against weather playing tricks both with farm income and with consumer supplies, we create a system of crop insurance. That is the fourth set of tools.

Farmers may use these measures as a means to improve their incomes on condition they are used to provide normal supplies of farm products for consumers.

Now, let's see how this works with wheat.

In order to give farmers plenty of time to plan their seedings, the Secretary of Agriculture early in the summer and not later than July 15, announces how many acres the Nation needs to have planted to wheat. This is the National Wheat Acreage Allotment.

Two main steps are involved in determining the national acreage allotment. First, the average amount of wheat consumed in the United States and sold abroad during the preceding 10 years is determined. If a trend is noted either up or down an allowance is made accordingly. To this figure is added 30 percent—to provide a margin of extra supplies. This total supply is the objective for the next year. However, there is some wheat left over from the preceding marketing year. The amount of this carryover is estimated and subtracted from the total supply needed and the result is the amount of wheat which must be produced to reach the objective.

As the second step, the amount of wheat the country should produce is converted into acres in order to know how many acres must be seeded to produce this much wheat. To find this out, the total amount of wheat desired is divided by the average yield of wheat per acre in the United States. The answer is the National Acreage Allotment for wheat; that is, the number of acres that should be planted to wheat during the year to yield enough for food, feed, seed, export, and reserves against unpredictable circumstances.

The National Acreage Allotment then is apportioned to each State and county on the basis of wheat acreage during the past 10 years, with allowances made for abnormal weather conditions, trends and acreage diverted under previous programs. In the counties, committees of farmers break down the allotment still further to determine the acreage allotment for each wheat farmer.

Farmers can plant in accordance with their acreage allotment if they want to. If they don't want to, they don't have to. But farmers who do not join up with their fellows in the program to balance supplies with the current needs are not eligible to receive Soil Conservation Payments or Price Adjustment Payments, or loans on their wheat.

WHEAT PRODUCTION IS NOT ALWAYS THE same from the same number of acres, however. Good weather conditions one year might bring more than the average yield. Another year, widespread crop failure might bring an unusually low yield. Like a good general ready to meet emergencies, farmers have measures ready for use when their supply threatens to become a depressing surplus or threatens to fall to an inadequate level. These measures form the main features of the Ever Normal Granary for wheat.

WHEN IT APPEARS THAT WHEAT SUPPLIES available during the next marketing year will exceed normal needs for consumption and export by more than 35 percent, the Secretary of Agriculture is obliged by May 15 to declare the wheat marketing quota provisions in operation and if two-thirds of the farmers voting in a national referendum vote their approval, the measure continues in effect.

WHEN THE QUOTA IS IN EFFECT, FARMERS may sell their share of the national quota which provides enough wheat to meet all market needs. For every bushel of wheat farmers market over their quota they must pay a penalty of 15 cents. The extra wheat, however, is not a drug on the farmer's hands. By safely storing the excess wheat, he can get a loan on it from the Commodity Credit Corporation.

If a national emergency should arise, the marketing quota provisions could be suspended.

Wheat loans are the next device used to outwit scarcity and the paradoxical misfortune of too abundant harvests. This double barreled mechanism works this way:

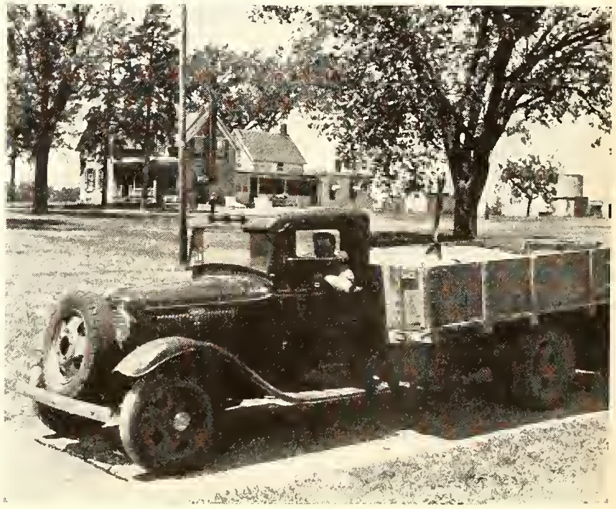
(1) When the price of wheat on June 15 of any year falls below a certain level, or

(2) When the crop estimate made by the Department of Agriculture in July indicates that the wheat harvest for the coming year will be greater than the normal amount of wheat needed for food, feed, seed, and export,

HARVESTS are planned before they are planted under the AAA farm program. A National Acreage Allotment, the total number of acres to be planted to wheat, is worked out so that too abundant harvests will not impoverish farmers and too skimpy harvests will not impoverish consumers.

AS a double check on too much wheat one year and not enough another, the AAA farm program provides for loans to farmers who can, if they wish, store part of their surplus crop against a later time when wheat may not be so abundant. This farmer has stored his wheat in the Ever Normal Granary and is now receiving his loan check.

AS a triple check on unbalanced production, crop insurance provides protection against bad luck in harvests. Reserves of wheat are stored in warehouses, to be paid out when crops fail. The farmer in this picture collected a load of wheat on his insurance when his crop failed. It was the first such wheat insurance payment made.



then wheat loans must be made available to cooperating farmers by the Commodity Credit Corporation, a loan agency within the Department of Agriculture.

THE PURPOSE OF WHEAT LOANS IS TO STORE excess wheat when it is dragging farm prices down, and to make the wheat available when inadequate supplies are pushing consumer prices too high.

When the farmer borrows money on his wheat, he gives wheat as security against his loan. This wheat is taken off the market. It may be stored in approved commercial warehouses or it may go into sealed bins on the borrower's farm in which case the farmer becomes a custodian for the Federal Government of the wheat he puts up as security.

By the time most of the loans fall due the following spring and summer the new wheat crop is sufficiently advanced so that an estimate of its size can be made with reasonable accuracy. Still another Ever Normal Granary measure offers protection to growers and consumers—the insurance mechanism.

NOBODY YET HAS SET UP A MAIL-ORDER house for weather. Nor can anyone deliver on order a 2-inch rain out in Kansas or wrap up and mail to anyone a perfect June day. But farmers and consumers can be protected against the hazards of weather, just as they are protected against the hazards of fire.

This is provided for by insurance. Wheat farmers may insure their crops, just as city people insure their houses. They can get policies that cover either a half or three-fourths of the normal yield on their acreage allotments. To handle this insurance business, Congress created the Federal Crop Insurance Corporation. To get insurance, a wheat farmer pays his premiums in wheat or in cash. When he pays in cash, the FCIC takes the cash and buys wheat. The wheat which the FCIC buys and the wheat which farmers pay go into another bin of the Ever Normal Granary. As the growing season progresses, drought, hail, flood and grasshoppers all take their ruinous toll in various sections of the country. When this happens those farmers who have lost their crops for any reason at all, report to the FCIC, just as they would to a company which had insured their house against fire. The FCIC pays off the losses, in wheat or in cash. Thus not only is the individual farmer protected against loss, but the country is insured against a wheat shortage caused by crop failure.

IN BREAD, IN CAKES, IN CEREALS, AND IN other products, Americans consume about 500 million bushels of wheat each year. Each year livestock muzzle up about 100 million bushels of wheat as feed. To renew wheat supplies annually the country needs about 85 million bushels of seed. On the average during the last 10 years about 70 million bushels of wheat have been sold abroad. Add to these 755 million bushels a reserve of 30 percent and our average wheat need totals about 980 million bushels. Thus, our annual wheat budget averages about 980 million bushels.

THIS is the sign of safety. A farmer-inspector affixes the seal of the Ever Normal Granary to his neighbor's wheat bin, after making sure that wheat is ready for storage and the bin is weather-proof, rat-proof, and insect-proof. Once the seal is up the farmer becomes one of the keepers of the Nation's wheat reserves. Some of the wheat is stored in commercial warehouses.

New Year's Day on the wheat marketing calendar is July 1, for that day is the beginning of the new wheat marketing year. On Wheat New Year's Day, 1939, to balance against the amount of wheat the country normally disposes of, there were in farm bins, in warehouse storage, and in the process of being harvested, some 1,009 million bushels of wheat—enough to balance the budget, with plenty to spare.

WHAT PART DID THE EVER NORMAL GRANARY machinery play in providing this year's abundance and next year's insurance against want?

Well in advance of seeding for the 1939 crop the Secretary of Agriculture announced the National Acreage Allotment for wheat. It was 55 million acres, a large enough acreage to produce what was needed for normal consumption and sales abroad, and for a 30 percent reserve. Seedings were somewhat higher than the acreage allotment, but the 1939 crop was harvested from about 54 million acres.

The 1939 harvest totaled 755 million bushels. In addition there were 254 million bushels left over from the year before, providing the Nation with a 1939–40 wheat supply of 1,009 million bushels.

When the abundance of this harvest had been appraised, the loan feature of the Ever Normal Granary began to function. The loan rate this year ranged from 73 to 87 cents a bushel at terminal markets (loan rates on the farm were less than this by an amount roughly equivalent to the cost of hauling wheat to market). The Nation's average loan rate to farmers was 64 cents a bushel.

Under the 1939 loan, 167 million bushels of wheat went into storage, part in bins on the farms inspected and sealed by farmer-inspectors, and the remainder in terminal warehouse storage.

On farm-stored wheat the seal nailed up on the bin by the farmer-inspector reads:

"EVER NORMAL GRANARY

"Sealed Under Authority of the Agricultural Adjustment Act of 1938, as Amended.

"The United States Department of Agriculture certifies that this storage structure for grain has been officially inspected and is hereby sealed pursuant to the provisions of the Agricultural Adjustment Act of 1938, as amended.

"Any person tampering with this seal, as affixed by the official inspector, or breaking or entering this structure, or who in any manner interferes with the grain stored herein, unless authorized to do so, shall be subject to the provisions of the United States Criminal Code. H. A. WALLACE, *Secretary of Agriculture of the United States.*"

After the seal is put up, the farmer takes up his duties as one of the custodians of the Nation's reserve supplies for wheat on behalf of the Nation's consumers.

Besides the wheat on the market, and the 167 million bushels of wheat in storage under the Ever Normal Granary seal, there are 12 million more bushels of wheat in the Federal Crop Insurance Corporation reserves to insure individual farmers against loss on their 1940 crop. These are reserves accumulated from the payment of premiums on the wheat sown this fall. By next March premiums will have been paid on the spring sown wheat and the total insurance reserves should amount to about 20 million bushels.

Thus 3 of the mechanisms in the Ever Normal Granary are working: The national acreage allotment, the loans on sealed stored wheat, and crop insurance—each contributing to the Nation's abundance of wheat so that today our wheat balance reads:

Our average need—980 million bushels.
Our 1939–40 supply—1,009 million bushels.

CONGRESS has ordered the Bureau of Home Economics to investigate cotton hosiery as a possible outlet for more American cotton. Already technical experts in the Bureau have designed 50 new constructions for cotton stockings. First step in making such stockings is laying the design out on paper.

When You Buy Stockings

Until stockings are labeled with simple quality grades, stretching dollars requires knowing many facts about stocking construction

QUEEN ELIZABETH, turning her attention from affairs of state to affairs of fashion, found one day that the knitters of Nottingham were on the palace doorsteps. They were there to protest a lamentable change in the styles of the period.

Skirts being voluminous and long, practical-minded ladies had taken to wearing anklets instead of stockings. Not only did the knitters consider this style change an immodest one; they believed it was injuring the business of Nottingham. The knitters appealed to the Queen to put an end to the stockingless fad.

Touched by their appeal, the Queen issued a decree. Henceforth, she ruled, it would be an offense against the Crown not to wear stockings on Sundays and holy days.

Today, royal decrees are not necessary to persuade consumers that stockings are a desirable article of clothing on weekdays as well as weekends. Indeed, they have become an essential, purchased by women of low and high incomes, on farms and in cities, by women who work at home and those who work in factories.

When the bureau of home economics turned its searchlight on expenditures by the wives in non-relief families in 1935–1936, it found how large the stocking bill looms in the clothing budget. Among such women living in small cities through the North Central and Western States, for instance, expenditures for stockings accounted for 6 to 13 percent of the money spent for clothes.

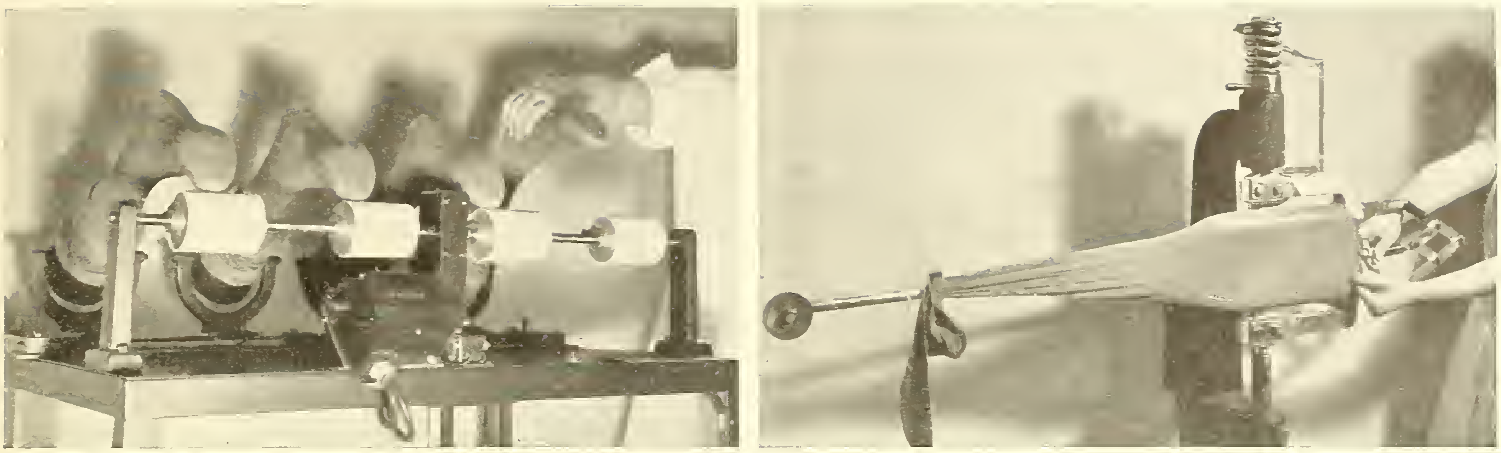
Wives in families with incomes under $500 spent $27 for clothes, and the $3 of this which went for stockings bought 4 pairs. Those in $1,000 to $1,500 income families spent $47 for clothes, and the $6 spent on stockings purchased 8 pairs. At the top of the scale, where families had incomes of $5,000 or more, the wives expended $211 on clothes for themselves, using $13 of this to buy 13 pairs of stockings.

Not fashion alone, but the nature of the fiber has made silk the favored fiber for women's hose. Some 80 out of every 100 pairs of women's stockings made in American factories are the product of the Japanese silkworm. Relatively few cotton stockings for women are sold, partly because few types now on the market measure up to silk stockings in elasticity, durability, and appearance. Should these shortcomings be overcome, a great demand for cotton hose might develop. According to one estimate, if cotton hose of comparable weight were used to replace all women's full-fashioned, all-silk hosiery, nearly 43 million pounds of lint cotton would be required. Roughly about one-half of this amount would be needed in part-silk hose, making a possible total demand for 64 million pounds—a sizeable dent in the great surpluses of cotton now burdening growers and depressing prices.

Last year Congress directed the Bureau of Home Economics to investigate the possibilities of hosiery as an outlet for more American cotton. Already the Bureau has devised over 50 new constructions for cotton hosiery, both plain knits and mesh designs. The stockings are full-fashioned, and are made in various gauges and weights. New methods for improving elastic properties and snag resistance are being developed. Through tests, researchers in the Bureau hope to be able to select the best designs and styles, and then to interest manufacturers in making such stockings available on the market.

Until quality standards are available and labels give real information, the consumer who wants to buy wisely must transform herself into an encyclopedia to judge the durability of a stocking.

These facts are important: the thread weight of the yarn; the gauge of the stocking; size and length of the hosiery; degree of twist of the yarn; elasticity of the yarn; type of welt, bursting strength of the fabric, and whether the stocking is circular knit or



MILES of wear on toe and heel can be duplicated in a few hours by the machine on the left. Measuring the elasticity or "stretch" of a stocking (right) is another test which the Bureau of Home Economics makes in its laboratories on cotton hosiery.

full-fashioned. Some of these things she can see for herself, others she must look for on stocking labels.*

Thread weight in the case of silk stockings, is the first thing to observe. By the weight or size of the silk yarn is meant the number of threads twisted together to form the silk yarn. If 2 threads are twisted together you have a 2-thread yarn; 4 threads twisted together means a 4-thread yarn; and so on.

Weight of the yarn affects durability and appearance, or sheerness, of the silk stocking. The lower the thread number the more sheer and delicate the stocking. The higher the thread number, the heavier the silk yarn.

Gauge in the stocking means the number of needles in each 1½ inch of the needle bar used to knit the stocking. Gauge indicates the fineness of the knitting, and is frequently considered one measure of the elasticity and strength of the stocking. In general, the higher the gauge number, the more closely knit is the stocking. It is better to buy stockings that have the gauge number and the number of threads making up the yarn plainly stamped on the label or on the stocking itself.

Even this, however, may sometimes deceive the consumer. Some manufacturers to meet a retail price range—in the absence of any standards—may stamp the gauge number of the *knitting machine* on the label, but fail to tell the consumer that all of the needles of the machine were not used during the actual knitting process.

Gauge by itself is no absolute measure of a stocking's durability. Other things must also be considered; particularly the thread weight of the hosiery. As a rule, sheer stockings have a high gauge number and a low thread weight. High gauge and high twist stockings have more elasticity, but if they are made with a 1- or 2-thread yarn, they are not intended for everyday wear.

Sheer stockings sold at low prices may mean the manufacturer has used a low gauge machine to knit the fine yarns, skimping on the amount of yarn in the stocking and the amount of twist in the yarn.

Better wearing stockings—service and semi-service weights—have a higher thread weight than sheer hose and a slightly lower gauge.

With 2 pairs of stockings of the same thread weight, the one with the higher gauge will obviously be the better buy for serviceability.

If you want sheer (chiffon) hose—for evening and dinner wear—ask for a 2- or 3-thread stocking, 45 gauge and up. Gauge of such hosiery may even go as high as 60. Stockings with lower than 45 gauge cannot be expected to outlast heavy wearings.

When buying everyday hosiery for street, office, or school wear, choose a 4- to 6-thread stocking with a 42 to 45 gauge count for the 4-thread, ranging down to a 39 gauge for the 6-thread stocking. Poorer quality stockings in these thread weights may have a lower gauge. This means a sleazy product that will not long resist strain or hard wear.

For service-weight hose—used for hiking, walking, street or school wear—buy those of 6- to 9-thread yarns. The gauge should average around 39 to 42.

What holds for silk stockings holds only in part for cotton and rayon hosiery. They are knit in the same gauge, but there is no such thing as "thread weight" in rayon hose, and in cotton "thread weight" has an entirely different meaning.

Measuring the "weight" of cotton is a complicated business. Consumers would have to lie awake nights to understand the meaning of present "weights" as applied to the yarns. So far no one has come forward with simple, understandable standard for expressing cotton weights—standards which, if put on the label, would inform the consumer, rather than confuse her.

Lisle hose are made with the finest cotton yarns. They are more sheer than ordinary cotton stockings, and cost more. To make lisle stockings, the yarn may be gassed to remove short ends; is highly twisted, and is sometimes mercerized to give luster. With this type of stocking the Bureau of Home Economics hopes to get better wearing quality by using yarns from long staple cotton, specially treated to increase elasticity.

Cotton hose is made in both plain knits and mesh designs. Some of these are made with a special stitch to prevent runs. This information again is something to look for

---

******"Hosiery for Women—A Buying Guide," published by the Bureau of Home Economics, tells in picture form the points to look for in buying stockings. It costs 10 cents and can be purchased from the Superintendent of Documents, Washington. D. C.*

THIS machine is no handy little gadget for consumers to take to market with them, but experts use it to "weigh" a cotton yarn. Generally, the heavier the cotton or silk yarn, the more durable and heavy will be the stocking. Consumers should look for labels that tell what the weight of the yarn is in a stocking.

on the label. In any case, all novelty knits should have adequate foot reinforcements.

Heavier cotton stockings wear extremely well, find most favor for hiking, playing, or gardening, or work about the house.

Rayon may make a durable hose. Points in its favor are its low cost, and the fact that it is usually ringless. So far no method has been devised to give rayon the elasticity of silk, or to make rayon hosiery hold its shape as well as silk.

Here are other points to watch for in hosiery of all 3 yarns. Look for smooth, well-finished seams, preferably stitched with a sturdy but fine cotton yarn. Heels, toes, and soles should be reinforced to increase wear. Some women prefer a cotton welt (top) on silk service weight hosiery, since it is less susceptible to runs and wears better. It is bulky, however. Reinforcements at the welt and on the foot may be at a sacrifice of appearance, but they also fortify the weak spots against too rapid wear.

Examine the hosiery closely for "rings," oil spots, and imperfections in the weaving.

Re-dyed stockings sometimes lose durability, and should be labeled as "re-dyed" and sold at sale prices. Irregulars and seconds should also be labeled as such. Often retailers will advertise these products as "bargains," without telling the consumer that actually the price has been cut because the hose have defects. That is all the more reason for a fine-comb inspection of stockings before you complete the purchase.

Twist of the yarn, technicians at the National Bureau of Standards have found, has a lot to do with the snag-resistance—particularly in yarns of silk or cotton—of the stocking. A highly twisted yarn is thought to be a help in diminishing the snag mortality of stockings, but it is possible to twist a yarn to the point where more harm than good is accomplished. For consumers, the solution would be to set up standards of snag resistance for hosiery. It is here that consumer persistence in asking for such standards might get results from cooperating manufacturers. Research leading to such standards would promote development.

Elasticity of the yarn is something else again. Cotton and rayon are not as elastic as silk, but studies show that elasticity of cotton can be increased by special treatment. A number of synthetic newcomers to the field promise to equal silk in resilient properties. It is a simple matter of stretch to test the elasticity of a new silk stocking. You should be able to stretch the welt to 12 inches, the ankle of the stocking to about 7 inches, the foot (in the width) to 6 inches, and the width of the calf to 10 inches. In every case the stocking should return to within a quarter-inch of its original size. If it doesn't, then you would be wise not to buy it. When you stretch the stocking, notice the "ribs" running up and down. These should be equally spaced in well-made hosiery.

"Full-fashioned" to some women is a hallmark of stocking quality. Actually, the term may be deceiving unless you know what a full-fashioned stocking looks like. The way to tell a full-fashioned stocking is this: Look at the back of the stocking and find the small fashion marks on either side of the seam half way down the leg. Then examine closely the row of stitches on the outside of these fashion marks. Do they meet the marks at an angle, or are they parallel to the marks? If they are at an angle, then the stocking is full-fashioned. If the stitches are parallel to the fashion marks and seam, then the stocking is circular knit. In that case, the

If you wear this size shoe . . .	*ask for this size stocking*
4	8½
4½	8½
5	9
5½	9
6	9½
6½	9½
7	10
7½	10
8	10½
8½	10½

These sizes, recommended by hosiery manufacturers, and reported in Montana Experiment Station Bulletin 299, titled "Selection, Care and Wearing Qualities of Women's Silk Hosiery," are a general guide only. For correct fitting, width as well as length of the foot must be considered.

fashion marks are put there merely to deceive the eye.

A circular knit stocking does not require a seam, one may be "planted" simply to imitate full-fashioned knits. Putting mock fashion marks and mock seams in circular knit stockings is a common practice. Unless the label tells you plainly these are put in only for appearance, then you have a right to consider the hosiery suspect.

Full-fashioned stockings are not only fashioned in the leg portion, but also in the foot, heel, and toe. If the stocking has a full seam, running under the heel and foot, chances again are that it is full-fashioned.

Circular knit stockings are cheaper to make, may be just as durable as full-fashioned hose. By reducing the size of the stitches, they can be shaped to fit but there is no guarantee against their becoming baggy after laundering. Many women can wear the circular knit hose just as well as the full-fashioned kind, and can accomplish substantial savings to boot. About one out of every three stockings sold in 1937 was circular knit.

RUNS ARE THE WATERLOO OF ALL STOCKINGS, particularly those of silk, lisle, and rayon. The Federal Trade Commission has cracked down again and again on manufacturers falsely advertising "run-proof" hosiery. A stitch has been patented that is run resistant, and stockings with this are sold. They are more expensive than ordinary stockings and so far no method has been devised of giving the hose an appearance of sheerness. These stockings will snag but will not run.

Some silk hosiery is "treated" to make it resistant to runs and water. Ninety-nine percent of these finishes come out in the wash. None of them makes the stocking run-proof, although some increase its snag resistance and elasticity. Run-stoppers, applied immediately, are a temporary help in checking a run already started. Home treatments to restore the snag resistant "finish" to stockings are also partially successful. The National Bureau of Standards tested a number of these home finishes a few years ago and made this conclusion: "Some of the finishes decreased the distensibility, elasticity, and resistance to failure of the stockings when repeatedly distended. Others . . . had the opposite effect and . . . may be considered beneficial . . ." Of the finishes containing aluminum soap, the report said this: "The treatment will not prevent runs. It will make the fabric water-repellent and therefore, resistant to spotting. The tests made at the Bureau indicate that it will improve the distensibility and elasticity of some silk stockings."

WISER INSURANCE AGAINST RUNS OR SNAGS is not to buy stockings that are loosely knit, fuzzy, or badly constructed. And don't wear shoes with broken down interiors, holes in the lining, or those that are bad fits. More than any other single thing, these failings in shoes raise havoc in wear and tear on the foot of the stocking.

Size of your hose generally should be a half inch longer than your foot. Remember that hose size simply means the length of the foot in inches. On page 8 we give a table of shoe sizes correlated to the size of the stocking, suggested by hosiery manufacturers, according to the Montana Experiment Station.

IF YOUR HOSE WEAR OUT AT THE HEEL OR the toe in short order, it probably means you are buying a size too small or too large. Women with narrow feet should select a size slightly smaller than would be selected by women with feet of average width. This permits the stocking to adjust itself to the foot, and there is no excess fabric to rub against the shoe.

Standard length of stockings, as defined in a Commercial Standard issued by the National Bureau of Standards, is 30 inches. Of course, you can get them in other lengths. Stockings that are too long or too short usually don't last as long as those that fit correctly.

When you put on or take off a stocking, be careful of sharp fingernails, jewelry, calloused skin. A good idea is to roll the stocking before putting it on, then slip it over the foot and gently draw it over the calf. This will avoid accidental snags or runs.

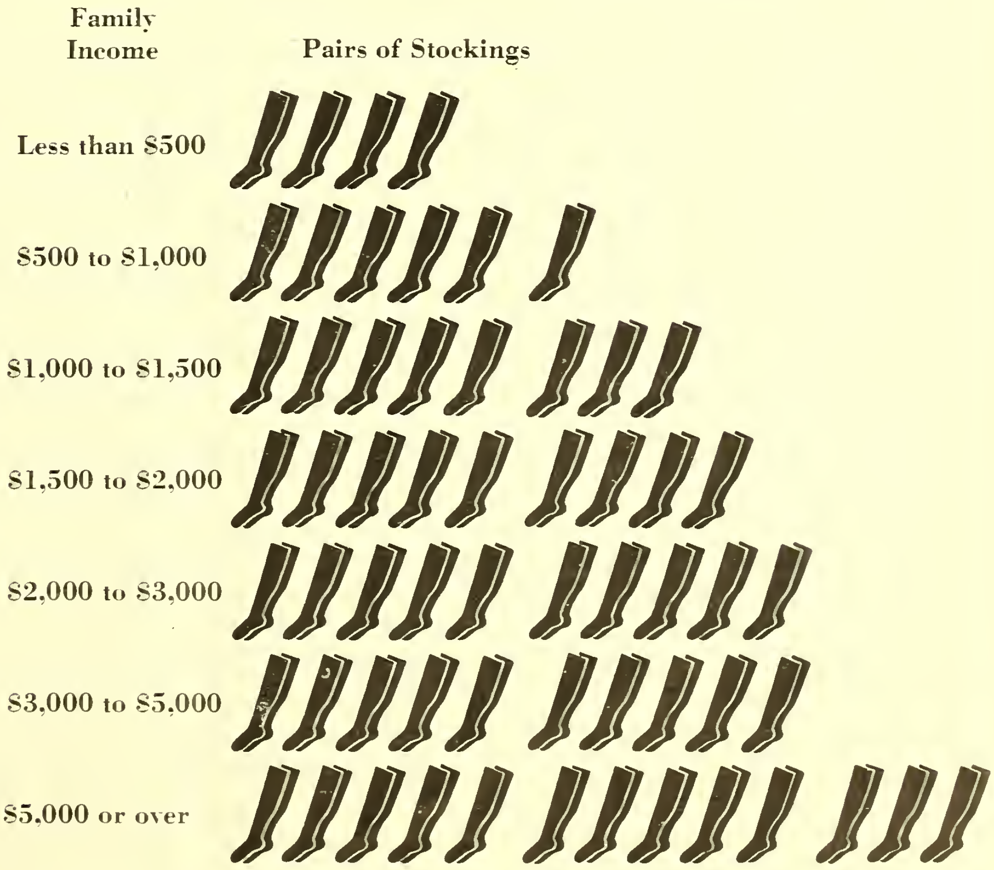
Wash hosiery as soon as possible after each time they are worn. Use a mild soap and lukewarm, soft water. Silk and rayon stockings particularly should be handled with care.

Press or squeeze out the soap suds and rinsing water—never rub or scrub hosiery. Then roll the stockings in a soft towel to absorb the moisture, and hang them over a line to dry, rather than fastening them with clothespins. Don't hang the hose in the hot sun or near a hot radiator. The best place is a warm room with circulating air.

Last, never iron hosiery. Ironing not only causes them to lose shape; it can ruin delicate silk and rayon fibers.

THEY BOUGHT THESE PAIRS

Wives in non-relief families in small cities in the North Central and West purchased these pairs of stockings in the year 1935–1936:



Simple as A B C—

How quality grading of canned fruits and vegetables grew as a Government service and what yardsticks it provides for consumers

"WHEN I USE A WORD," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean—neither more nor less."

"The question is," said Alice, "whether you *can* make words mean so many different things."

"Ah," smiled Humpty Dumpty, "you should buy a can of lima beans."

"Lima beans? My goodness, I was supposed to buy a can of lima beans. But where can I buy lima beans on this side of the Looking Glass?"

"Over there," Humpty Dumpty pointed, indicating a great blaze of neon lights.

"Thank you," Alice said, and she walked over to the store, nodding to the White Queen who was emerging with a market basket.

The store was as dazzling inside as it was out. There were black and white enameled panels everywhere, and not a speck of dust. Foods glowed under colored lights that brought out their most appetizing tints. Just waiting for a clerk, Alice became ravenously hungry.

Finally the clerk appeared.

"I want a can of lima beans," Alice said to the clerk.

"Yes, Madam," the clerk responded. "A can of select lima beans?"

"Select lima beans sounds fine," Alice nodded. "There are no lima beans choicer than select, are there?"

"Well," said the clerk, "we have superb lima beans."

"Pardon me," Alice stammered apologetically. "Superb lima beans would naturally be better than select lima beans. If I weren't so serious-minded I would say superb will suit me superbly. Since they are your best lima beans, give me some of them."

The clerk cut her off as if he were short of temper. Alice, his manner indicated, was acting stupidly. "Superb aren't necessarily our best lima beans at all. Of course we have select and superb lima beans, but then we have superior lima beans, and supreme lima beans, too."

"Oh, dear me," Alice cried, "I just can't get this straight. Superb, select, supreme, superior. They all seem to me like they must be the very best."

"Very best," the clerk interrupted. "We have them, too."

Alice suddenly reached into her purse for the piece of cake she always carried with her. Nibbling on it, she immediately became very small, small enough to disappear through a crack in the floor. And without any delay, that was what she did. It was all too confusing.

CONSUMERS, NO LESS THAN ALICE, ARE bewildered by words whose meanings don't stay nailed down, particularly when the words are used on the labels of foods you can't see because they're wrapped up in a can.

But it was farmers, dealers, and bankers—not consumers—who were the first to run up banners in favor of words with meaning and against words without meaning.

When farmers sell their products, and dealers buy them, and bankers lend money on them (transactions which occur and have been occurring thousands of times each day for a long time), there are three questions which must be answered:

What's the price?

What's the quantity?

What's the quality?

Describing price is simple. That's done in dollars and cents. But the reason it is simple is because the Federal Government has defined the measurements and the terms which apply to prices in a national law; one hundred cents make one dollar.

Describing quantity is also relatively simple. State laws, and in some cases Federal laws, define the pounds, quarts, and bushels which are measures of quantity.

But a quarter of a century ago there were no generally accepted measures of quality. The rule of Humpty Dumpty prevailed on

THE Cheshire Cat is about to dissolve into a grin as the grocer tries to explain the meaning of the adjectives on canned food labels to Alice. Consumers, like Alice, must find their way around in a wilderness of adjectives when cans don't show a simple grade standard on the label.

the farms and in the produce markets. It was the destiny of Humpty Dumpty to end his life as an omelet, but there never was an omelet as thoroughly scrambled as the meanings of the words which were used to describe quality.

Farmers, dealers, handlers, all had their own way of measuring quality, and their own words to describe it. A word that might mean high grade in one section of the country might mean run of the field somewhere else. That made it hard to carry on business by wire, by telephone, or by letter—as a good deal of business in farm products must be carried on. It made it difficult for bankers to lend money on farm products stored in warehouses. Even when business was transacted face to face between farmers and dealers, the dealer could look at a load of something and say it was pretty low grade. The farmer might protest that it wasn't low grade at all. Unless there is an established standard to refer to, however, an argument like that can go on forever. It's a case of you saying no and me saying yes.

This situation couldn't continue because it's just as impractical to buy and sell produce without accurate quality measurements as it is to buy without accurate measurements of quantity. Good quality potatoes sell for more than low quality potatoes just as two pounds of something cost more than one pound of something.

In urgent need of standard measurements for quality, farmers, dealers, and bankers finally turned to the Federal Government and asked for help.

Not everyone asked the Federal Government to step in, however. Some people, while admitting that there was a problem, scoffed at any attempt to set up standards of quality for fruits and vegetables and other farm products.

Nature, they said, never made two of anything from the same mould. Every apple, every potato, every pea in a pod is different from every other apple, every other potato, and every other pea. It's ridiculous, they remarked scornfully, to attempt to work out yardsticks of quality for fruits and vegetables.

Maybe, Congress said, and maybe not. But the problem is so pressing it's worth working at.

Year 1 in the history of federal standards of quality is 1902. In that year Congress appropriated money to the Department of Agriculture "to investigate the varieties of wheat . . . in order to standardize the naming of varieties . . . as an assistance in commercial grading." In 1906 standards history inched up a little when Congress authorized the Department to carry on special investigations in the grading of grain.

Apples are starred in the history of Federal standards for food because they are the subject of the first Federal law which defines a food standard. In a law passed in 1912 Congress said that standard grade apples, minimum size 2½ inches (or 2 inches or 2¼ inches) are apples packed in a barrel for shipment or sale in interstate commerce which are 2½ (or 2 or 2¼) inches in diameter, and are of one variety, and are also well-grown specimens, handpicked, of good color for the variety, normal shape, practically free from insect and fungus injury . . . The use of the apple standard was not made compulsory, however.

Standards took a definite spurt in the next year, 1913, when Congress moved along and passed a law authorizing the Department of Agriculture to grapple seriously with the problem of defining standards for all farm products by broadening its research in quality differences.

This scientific spadework brought an immediate legislative harvest in 1914, with the passage of the Cotton Futures Act which made the use of cotton grades (baled cotton, not cotton goods) mandatory under certain circumstances.

Two years later cotton, wool, grains, tobacco, and flaxseed won mandatory grades under somewhat similar conditions in the United States Warehouse Act which was approved on August 11, 1916.

Then in 1915 a telegrapher in the Department of Agriculture tapped a telegraph key to inaugurate the Federal telegraphic market news service, which reports to dealers and farmers on the prices and supplies of farm products in the markets throughout the country.

Immediately the men who ran the service came up with a bang against the fact that the prices they reported had no meaning unless they were based upon products of comparable quality. That required standards of comparison, or in the more usual phrase, standards of quality.

Additional experts were put to work on the formulation of grades that could be used and understood throughout the country.

War in 1917 gave a further impetus to the use of standards. The United States Food Administration, charged with feeding a nation at war, gave the movement a shove by requiring that all trading in potatoes be conducted on the basis of grades.

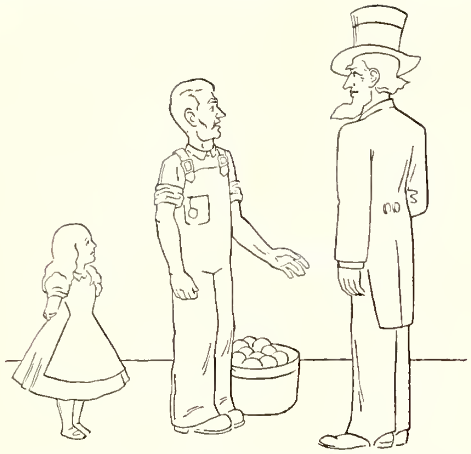
By the time the World War was over the use of Federal grades throughout the country was well advanced. In 1922 grading by Federal inspectors at farm shipping points was established, and thereafter the use of grades for farm products grew rapidly. Today about 90 percent of all commercially distributed farm products are sold by either Federal or State grades.

These grades, however, from wheat to lespedeza (a kind of hay), are not of much use to consumers. Fruits and vegetables change in quality on their way to retail markets. Grades for most fruits and vegetables are important to consumers, but only because they make marketing more efficient and thus reduce costs and prices. They are not guides for the consumer in the market place.

Can openers symbolize the next important standards development. By the time the can opener became the one gadget every family absolutely required to set up housekeeping, farmers discovered that an important part of their annual product was going to consumers after it had been detoured through a cannery. Canneries and other processors of fresh fruits and vegetables first of all needed special arrangements for the grading of the produce they used. These special arrangements came quickly, but then the dealers who traded in canned and dried fruits and vegetables began to demand Federally defined standards for these products just as dealers in fresh fruits and vegetables had asked for standards years before. The legal authority for Government grading of fresh fruits and vegetables, however, did not extend to canned and dried fruits and vegetables. A new law was needed.

Authorization for the Department of Agriculture to move over into the region where it could establish grades for canned and dried foods came in July 1931.

Now there are many notable differences between canned fruits and vegetables and fresh fruits and vegetables, but for consum-



PRICE has its standard measurement. It is expressed in dollars and cents. Federal and State laws provide for standard measurements of quantity. They are pounds and ounces, bushels and quarts. And recently, Uncle Sam, at the request of farmers and dealers, has worked out standard measurements for quality, too. For canned, dried, and frozen fruits and vegetables, these measurements are A-B-C grades.

ers a major difference is that once a fruit or vegetable is put into a can it stays there until it is poured out in some consumer's kitchen. For the most part, too, the quality of canned fruits or vegetables undergoes comparatively little change during the time these products hibernate in cans.

Just as it established grades for fresh fruits and vegetables, the Department of Agriculture went to work under its new authorization and defined grades for canned and dried fruits and vegetables. A-B-C grades they are called, and they have been worked out for some 33 products.

THE VIRTUE OF THESE GRADES IS NOT ONLY that they can serve both dealers and consumers, but also that they are so simple that the use of them by consumers requires no technical knowledge at all.

When a can of food is judged to be Grade A that means the fruits or vegetables in the can are about the finest obtainable, and that they have been carefully selected for size, color, and maturity.

Grade B fruits and vegetables have also been selected for color, size, and maturity, but with not such a sharp eye to perfection. While not the finest fruits and vegetables obtainable, they are nevertheless fruits and vegetables that are distinctly above average.

Grade C fruits and vegetables are good, wholesome, nutritious foods which may lack eye appeal. Just as nutritious as the top grades, they may not be quite as succulent. But they have their own advantage since they should sell at lower prices than the top grades.

The use of these grades is wholly voluntary. The grading service is maintained by the Department of Agriculture for whoever wants to use it, but no one is required to use it. Jobbers, bankers, and institutional buyers do use it extensively.

However, there are other standards whose use is not voluntary. They are standards of minimum quality and identity.

THE FIRST STANDARD OF IDENTITY FOR FOOD dates back to 1923, a year which deserves encirclement on every consumer's calendar. In that year Congress, with butter producers urging it on, passed a law which set up a compulsory standard of identity for butter. This law declares that all butter entering interstate commerce must be "made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter, and containing not less than 80 per centum by weight of milk fat."

Despite the fact that producers furnished the pressure which put the butter law on the statute books, consumers benefited from the law immediately and directly. While producers got protection from competitors who otherwise might have sold butter below this legal standard, consumers got the assurance that the butter they bought would meet certain minimum requirements.

Because the standard in this law carries all the way through to consumers, it is sometimes called a consumer standard.

If butter producers and dealers and consumers all find a compulsory legal standard for butter to their advantage, why, some people asked themselves, wouldn't compulsory standards for other foods be just as satisfactory?

This question germinated, and eventually sprouted in the shape of a law called the McNary-Mapes Amendment to the Food and Drug Act. This law became effective on July 8, 1931, 7 days after the Department of Agriculture received the go-ahead signal on the grading of canned and dried fruits and vegetables.

This law said: "The Secretary of Agriculture is authorized to determine, establish, and promulgate, from time to time, a reasonable standard of quality, condition, and/or fill of container as will in his judgment promote honesty and fair dealing in the interest of the consumer . . ."

Once a minimum standard of quality and fill (that's how near to the top a can should be filled) was established under this law, all foods that failed to come up to this standard had to be labeled to that effect in language and in type prescribed by the Department of Agriculture.

Starred in this law is the clause, "to promote honesty and fair dealing in the interest of the consumer . . ." Standards up until that time came about as a result of producer and trade demand to meet producer and trade needs. Here for the first time the Federal Government faced around the other way and provided for standards to meet a consumer need. One explanation why this happened is perhaps because consumers began to emulate producers and dealers and to make requests in their own behalf.

CLIMAX TO DATE IN THIS HISTORY OF GRADES and standards was, of course, the passage of the Food, Drug, and Cosmetic Act of 1938.

Consumers got full-fledged recognition again in this law when Congress said the Secretary of Agriculture could, "to promote honesty and fair dealing in the interest of consumers," promulgate regulations to establish:

1. A reasonable definition and standard of identity for any food,
2. A reasonable standard of quality, and/or
3. Reasonable standards of fill of containers.

In addition this law gives the Department of Agriculture the power to require labels to show what is in a food when no definition and standard of identity have been established for it.

Right now the Department of Agriculture is hard at work holding hearings, at which consumers are urged to be present, where these standards and definitions are being worked out for a long list of foods.

Under the present law when a food fails to meet the standard of identity fixed for it, it may not be labeled as such a food. When a food falls below the minimum standard of quality set for it, the label must show that the food is inferior.

It's important, however, to bear in mind the difference between a food which falls below the minimum standard of quality set for it, and a food which is illegal because it is unwholesome. A food may fail to come up to the minimum standard of quality and still be wholesome food. Since it is wholesome it may be sold as substandard but good food. Food that is so inferior in quality that it is unwholesome may not be sold at all.

THESE ARE THE TWO BOTTOM RUNGS ON the ladder of quality. Consumers who go shopping behind the plate glass of grocery stores know, however, that while minimum standards of quality and guarantees of wholesomeness are essential, they are not enough.

Like Alice, consumers have the problem

of coping with adjectives describing the quality of foods which rate above the minimum standard of quality.

Dealers, producers, and canners long ago learned that it was impossible to buy intelligently without quality measurements, that is, without recognizable grade standards. Today, by far the greatest part of their business is conducted on the basis of grades.

Headquarters in Washington for promulgation of A–B–C grades is the Agricultural Marketing Service of the Department of Agriculture. In this agency men thoroughly familiar with the character and complexion of the canning industry as well as of fruits and vegetables have the job of working up strictly defined, meaningful, useful A–B–C grade designations for canned, frozen, and dried fruits and vegetables.

THESE GRADE DEFINITIONS ARE NOT SUCKED out of an expert's thumb. Working up the grades leads the men who make the definitions first to the botanists who know the fruit or vegetable scientifically. Then the advice of farmers is sought to determine what they think. Dealers get their opinions on record. Packers are urged to describe what they think is feasible. And in recent years the preferences and prejudices of consumers find expression in grades too. Finally after consultation with all the persons and interests involved a grade is worked out. When this is done it is promulgated usually as a tentative grade with the recommendation that it be used and that its shortcomings, if any, be noted so that they may be corrected.

After a grade has been thoroughly tested and revised, it is then promulgated again as a permissive grade in the case of dried and canned fruits and vegetables. This means that the grade definition itself is official, but that it may be used or not as dealers and packers and canners see fit.

WHEN CANNERS OR PACKERS OR DEALERS want to label their products with A–B–C grade designations, they can do one of two things.

First of all, they may grade the product themselves, and simply pass this information on to consumers by printing the grade on the labels of their products. Since the labels must be printed anyway dealers who take this shortcut can give consumers grade label designations at no cost to themselves.

If a canner does not know the grade of the product he is selling, then he can ask the Agricultural Marketing Service to grade it for him. He may apply for the grading service to the Agricultural Marketing Office in any one of 44 cities scattered throughout the country. If this is inconvenient there is more than likely a sampler in his town licensed by the Department of Agriculture but not a Government employee, with whom he can file his application.

Samples of the goods to be graded are selected in such a way and in such quantity that they will be typical of the entire lot of goods being graded. These samples are sent to one of the 18 offices maintained throughout the country where grading of canned fruits and vegetables is actually performed. As soon as the quality of the product is determined from the samples a certificate setting forth the grade is given to whoever requested the grading service.

That this certificate is a reliable indication of quality is witnessed by the fact that it is accepted by the courts as prima facie evidence of the quality of the goods.

FOR THIS GRADING SERVICE A FEE IS CHARGED. However, when dealers in wholesale quantities have canned goods graded the charge per can is microscopically small, something around 1-100th of a cent per can.

If there is any question about the grade of a lot of goods, an appeal may be made and the goods will be regraded by experts whose job it is to handle appeals.

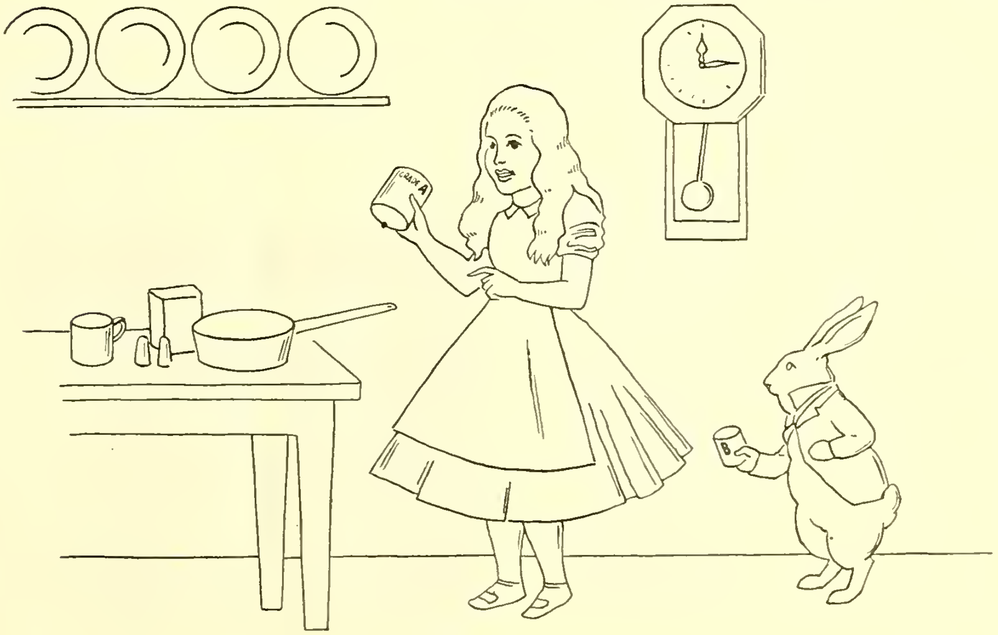
There are no statistics on the quantity of canned and dried fruits and vegetables which are now sold at retail with A–B–C grade designations on their label, but it runs up into millions of cans. They are sold in stores where consumers have asked for them. Most consumer cooperatives sell canned goods with grade labels. One national chain organization offers its customers A–B–C labels as a guide in marketing.

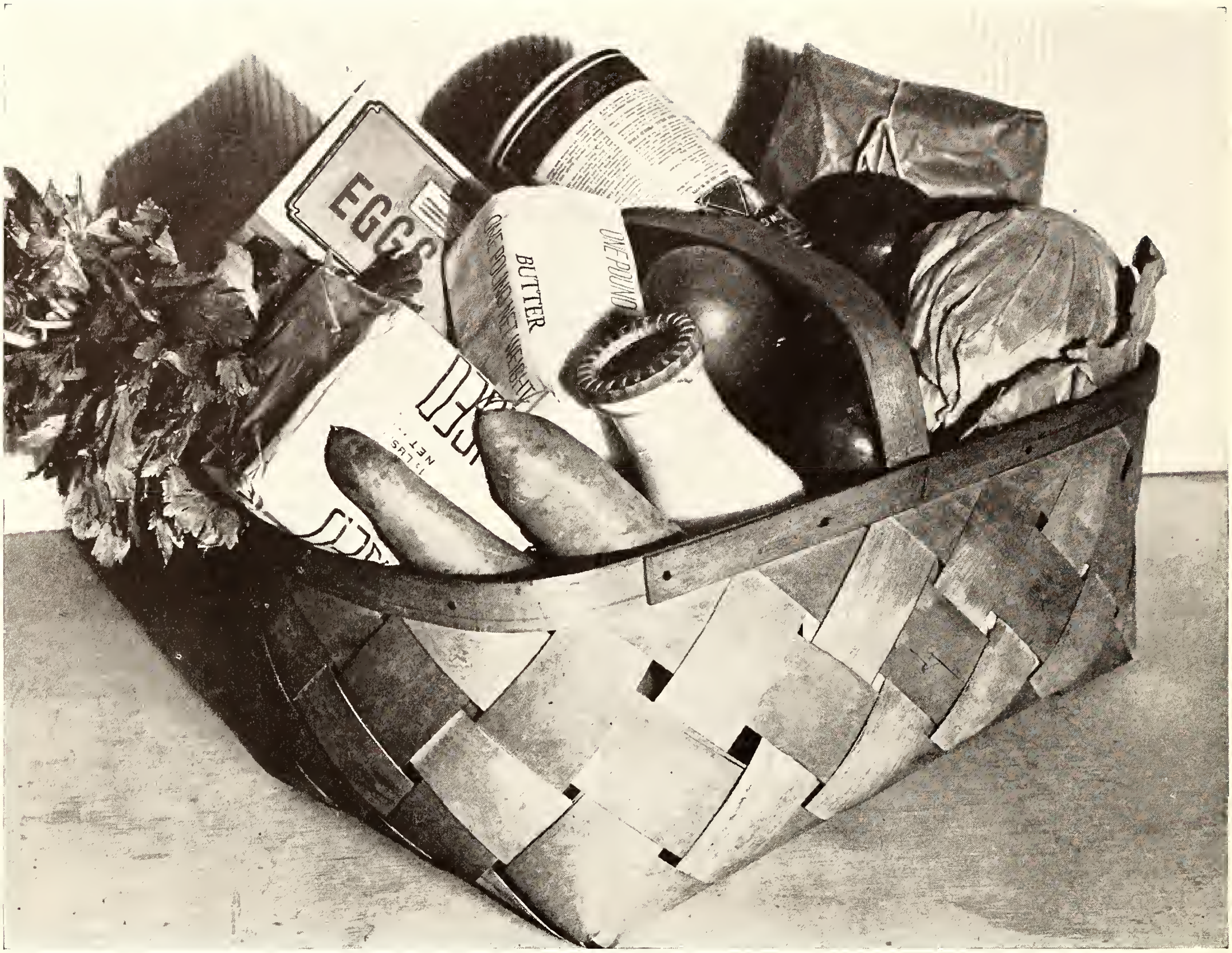
Dealers and canners, of course, demanded this service originally for their own use. But consumers, awake to their own need for grades, have now begun to ask that packers and dealers pass along this useful information to them.

In response to requests by consumers, the Agricultural Marketing Service recently revised the schedule of fees charged for the grading of canned fruits and vegetables so that consumers could use the service too. Formerly the minimum charge for grading was $1. Under the new schedule consumers may submit one can of food and get it graded for as little as 35 cents.

The service is not much use to consumers who buy a can of something at a time. It can be very useful, however, to consumers in buying clubs or in cooperatives who pool their purchases and buy in lots of several cases. In such instances consumers may take a can of the food they propose buying, send it to the Agricultural Marketing Service office for grading, and thus make sure that they are buying the quality they think they are buying.

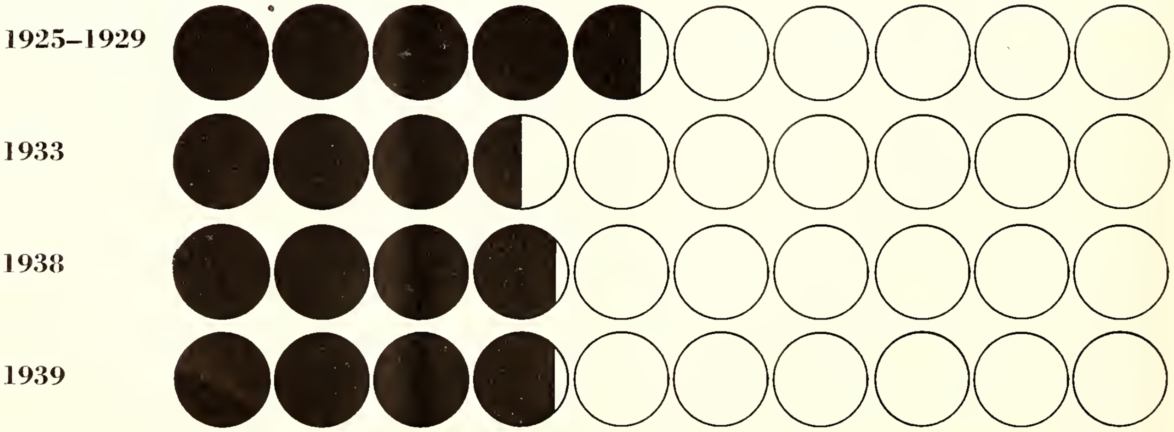
THE White Rabbit tells Alice that budgets balance best if you are not absent-minded when you go to shop. Find out the price, he advises. Find out the quantity (by reading the label). Then find out the quality by insisting on A-B-C grade labels. Without accurate quality measurements (A-B-C grades) it is impossible to compare prices at the grocery store. Grade labels help you to get the quality of food you want, and to compare the cost of different cans.

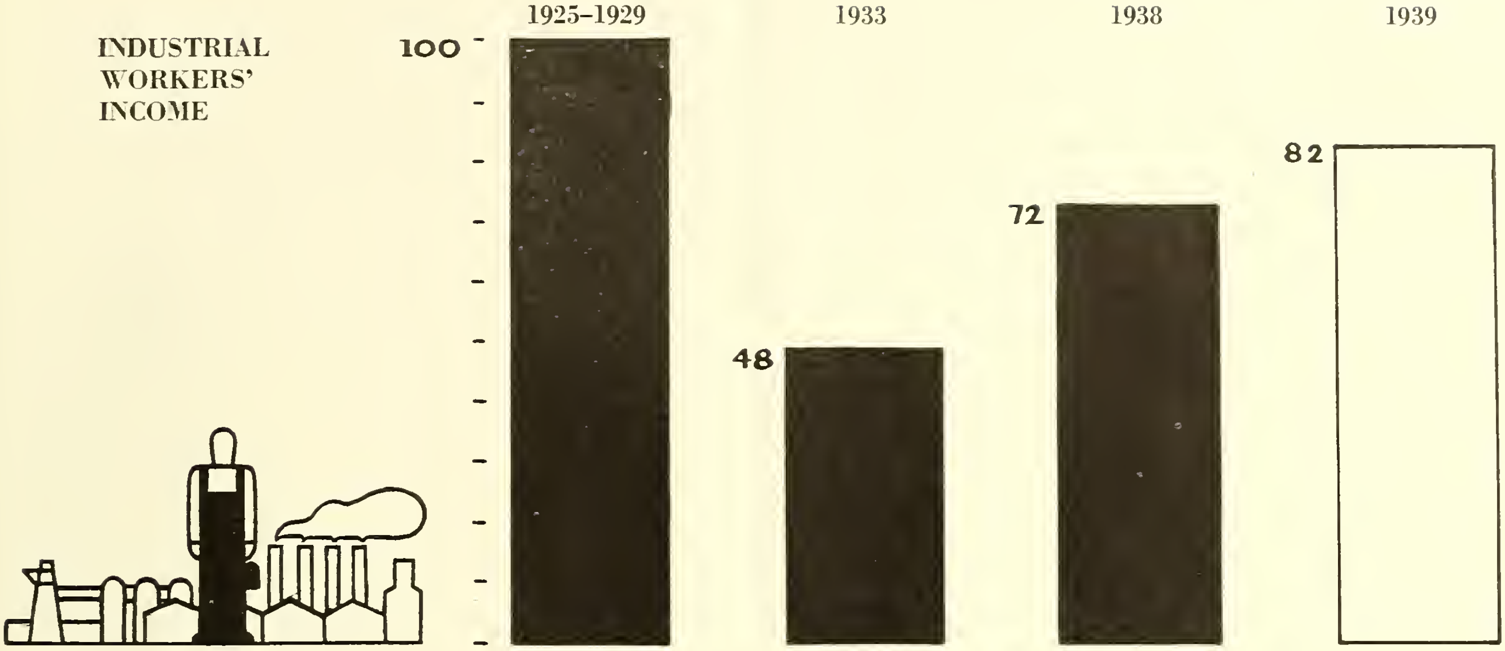




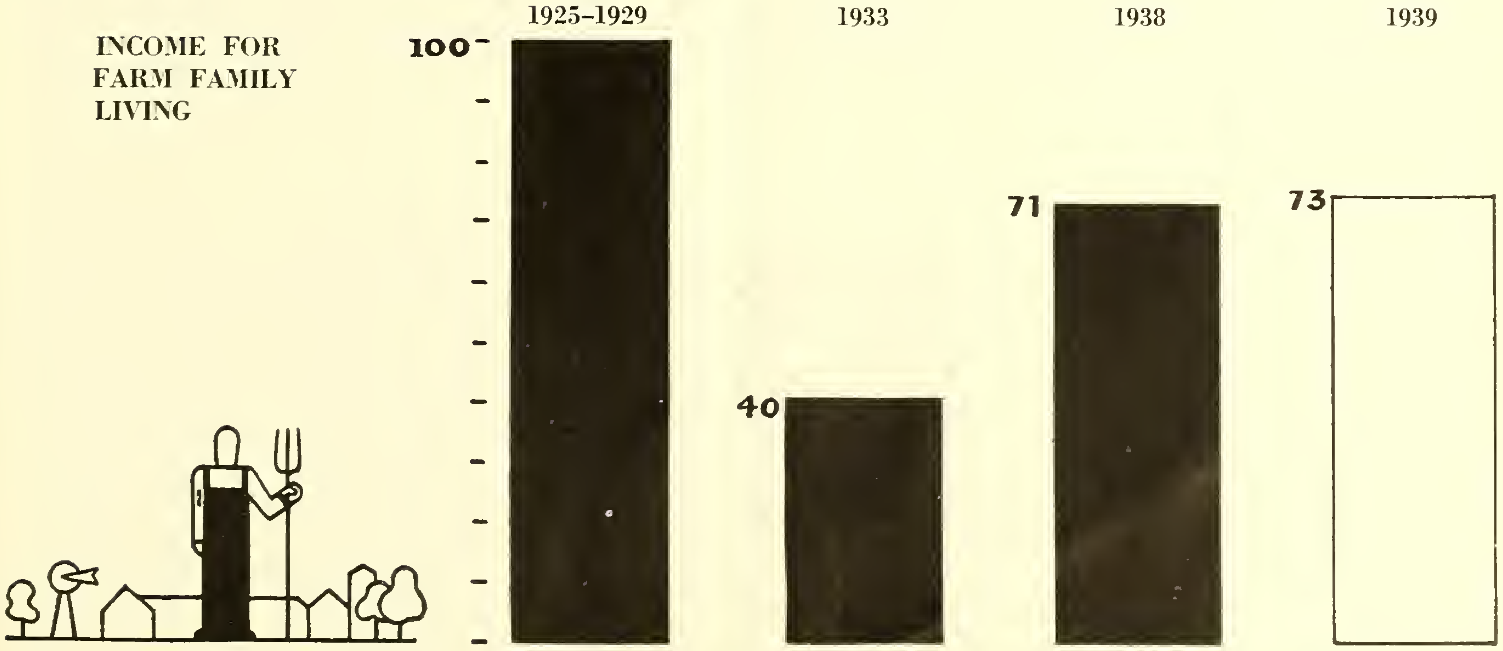
HOW FARMERS SHARE IN CONSUMERS' FOOD DOLLARS

Black dimes represent the amount out of each dollar spent for 53 foods which went to the farmers who produced the raw materials for those foods. White dimes represent the amount that went to processors and distributors.





These charts show where farmers' and workers' incomes in 1939 stood in relation to 1938, the bottom of the depression, and "prosperity" years. The white bars at the right represent the experts' estimates, based on incomplete data. Included in "industrial workers" are factory workers, miners, and railroad employees. Income for farm family living consists of gross farm income [income from the marketing of farm produce, the farm value of products produced and consumed at home, and Government payments] less the business expenses of operating farms.



IN THIS ISSUE

MARCH 1, 1940 ● VOLUME VI, NUMBER 11

The Nation's Extra Wheat Bin 3

When You Buy Stockings 6

Simple as A B C— 10

How Farmers Share in Consumers' Food Dollars 14

More Consumer Yardsticks 15

U. S. GOVERNMENT PRINTING OFFICE 205892°

1.94
A[illegible]
C. 5

FEEDING MILLIONS

LIBRARY
RECEIVED
JAN 8 - 1945
U. S. DEPT. OF AGRICULTURE

CONSUMERS' GUIDE

MARCH 15, 1940

BUYING SURVEY

MILK

COFFEE

CONSUMERS' GUIDE

MARCH 15, 1940, VOLUME VI, NUMBER 12

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

PEOPLE WHO SEE the little man who isn't there have nothing on other people who see qualities in products that aren't there.

Sugar, for example, that is, the table sugar consumers hand around when someone says pass the sugar please, is a highly standardized product.

The sugar on the table, cane or beet, whichever kind it happens to be, is practically 100 percent pure sucrose. If there should happen—which is very unlikely—to be some difference between brands in the purity or sweetness of the product, only a chemist could detect it though there may be some difference in the fineness of the grain.

Yet recently when a group of students in Chicago employed on a National Youth Administration project went out and asked 10,325 Chicago consumers what brands of sugar they bought and why, 212 of the housewives said they bought their favorite brand because it was sweeter.

Each of these 10,000 or so housewives expressed a first preference for one of some 13 different brands of sugar. Most preferred their brand because it was "pure." The next most popular reason given for preferring a particular brand was that it was "popular." Approximately 1,500 housewives gave "price" as the reason for their preference, others said their favorite brand "dissolved quickly," that it was the "best on the market," that they could "use the carton for other things," and that it had "finer grains."

Housewives also had a chance to put on the record their preference for the various brands of coffee, tea, flour, hand soaps, scouring powders, and canned pears and peaches.

They had 33 favorite brands of coffee, 23 favorite brands of tea, 21 favorite brands of flour, 21 preferred hand soaps, 22 different kinds of scouring powder they swore by, 25 different first choice salad dressings, 34 brands of canned pears that commanded their loyalty, and 30 different favorite brands of canned peaches.

In each case, more than 90 percent of the housewives gave reasons for their first choice. They preferred the flavor, or the taste, or the deliciousness, or the mildness, or the fragrance, or the texture, or the purity, or the price of their favorite brand.

Two subjects which many consumers regard as extremely important were also dealt with in the survey. First, the Chicago housewives were asked "Do you favor use of labels on all goods to indicate quality, so that you may know what you buy?"

"Yes," said 4,184, or 41 percent, of the consumers questioned.

"It isn't important," 1,210, or 12 percent, said.

A plurality—4,931 housewives, or 47 percent—replied, "Not interested."

On the other hand, a majority, 5,761 indicated that they were in favor of standard-sized cans for canned foods. Approximately 36 percent, 3,670, weren't interested in standard cans, while 894 consumers, 9 percent, didn't think the question important.

People differ on what surveys like this one mean, but despite the differences of opinions, advertisers, newspapers, and other enterprises in the business of advertising and selling undertake them (they call this kind of activity market research) at vast expense in the belief that this information is essential to a successful selling campaign.

Consumers on the other hand can use market surveys themselves. From them they may learn how they go about buying, and from that information they can proceed to find out how they can improve their buying practices. Teachers of classes in consumer problems may find out from these surveys what kind of consumer education is needed.

One advantage a market survey has is that consumers, themselves, can conduct them on a small scale. They make interesting projects for consumer study groups and they throw light, sometimes, on queer buying quirks consumers never suspect themselves of having.

Consumers who want to know more about the labels on canned foods which tell the quality of the contents should read *Consumers' Guide* of March 1, 1940. Information on standard can sizes for canned foods and why they are important is contained in the August 1939 issue of the *Consumers' Guide.*

SCRAP IRON TODAY has a sinister ring because of its use in munitions, but scrap iron is used to build up red blood as well as to spill it. Of course the kind the body uses is a different form than the material for war. An article in the current Yearbook of Agriculture, *Food and Life,* points out that the human body, like industry, uses iron over and over again, and that the iron the body gets in a well-balanced diet is put to work new, second-hand, third-hand—many times. There is just a little more iron in the body than there is in a shingle nail, but this sliver of iron is an essential ingredient of the red coloring matter of the blood. It enables the blood to carry the oxygen the body needs to all its living cells. Eventually, the cells break down, but an intricate mechanism salvages the iron from the cells so that it can be stored in the liver. From there it is carried to the bone marrow as needed where new living cells are produced each with its charge of iron.

The body reworks iron so efficiently that some authorities say it needs to get from food only one-sixth of the total amount of iron it uses each day in the manufacture of living cells. The rest of the iron is reclaimed from the body's own scrap heap.

Even so, a great many people do not get enough iron in their diet to supply all they need. A regular and adequate intake of it is necessary. Among the better-than-average dietary sources of iron are most of the green-colored vegetables, lean meats, poultry, eggs, oysters and shrimps, whole-ground cereals, molasses, and liver, heart, and kidneys.

Consumers who like prospecting for nuggets of wisdom about the feeding of human beings and animals will find a rich mineful in *Food and Life*, the 1939 Yearbook of Agriculture, copies of which can be purchased from the Superintendent of Documents, Washington, D. C., for $1.50 a copy.

For pictures on New York, our thanks go to the Army Air Corps, Farm Security Administration, and the Pennsylvania Railroad; for coffee, to the National Coffee Department of Brazil, and the Pan American Union.

BUYING SURVEY

The Physiology of a Great City

It takes the regular, continuous, and efficient cooperation of hundreds of thousands of farmers, transportation agencies and workers, handlers, and dealers to supply a great modern city with food. A break in that continuous chain of activity would bring incalculable harm both to consumers and farmers

TOOTHACHES TURN A MAN'S mind to the blessedness it is to be without a toothache, and it takes a broken arm for a man to appreciate the state of grace a whole arm affords.

Penny wisdom of the same order has its applications to the economic anatomy.

Most often New York City is as little aware of up-State New York, Alabama, Iowa, and Arizona as a human being is of (1) his flexor-brevis-digitorum-pedis muscle, (2) his pineal gland, (3) his levator labi superiori alaeque nasi, or (4) his suprarenal gland.

Something must go wrong with these glands or muscles before most people get on speaking terms with them, and in the same way people in a great city pay practically no attention to the muscles and glands in their economic anatomy until they twinge.

New Yorkers got a toothache-like signal last summer, for example, when the milk supplies from up-State New York began to fail.

Again occasional twinges remind New Yorkers sometimes that drought has affected lettuce in Arizona, or that fungus has attacked peaches in Georgia, or that a shortage of corn has brought on something acute in the way of meat supplies in Iowa.

In 1921, New Yorkers, told that an interruption in transportation threatened, took the news the way a man might if he were told he was in imminent danger of a paralytic stroke. Fearsomely they began to think about their economic body and to wonder what life would be like paralyzed.

The interruption never took place, fortunately, but a subsequent study by the Port Authority of New York showed clearly the trouble New York would have been in.

Fresh milk would have evaporated over night.

Enough cases of butter, however, were stacked up in storage then (it was the peak of butter storage season) to last 30 days.

Evaporated milk supplies, held by retailers, wholesalers, and in warehouses would have lasted from 4 to 6 weeks.

Grain was stored in sufficient quantities to last 30 days. After that bread and cereals would have disappeared from the tables of New Yorkers.

Fresh meats were racked up in cold storage in quantities large enough to supply steaks and stews and roasts for 6 to 8 days.

Potatoes, bananas, citrus fruits, apples, pears, and similar commodities would have lasted some time, but most fresh fruits and vegetables would have disappeared overnight like milk.

Cold storage facilities, however, held ample supplies of eggs—enough for 3 months; dressed poultry, too, was ample enough to keep chickens in most pots for 30 to 60 days.

Had the threatened stoppage occurred in 1921, it would have exhausted fish supplies except of salmon, before the clock went around once.

Sugar would have lasted for 2 to 3 weeks.

Coffee, tea, and spices would have lasted indefinitely since New York is a major warehousing and distributing center for these products.

Enough canned fruits and vegetables are shipped into New York at the end of the canning season late in the fall to last a full year.

Dried peas and beans similarly would have lasted through most of the year.

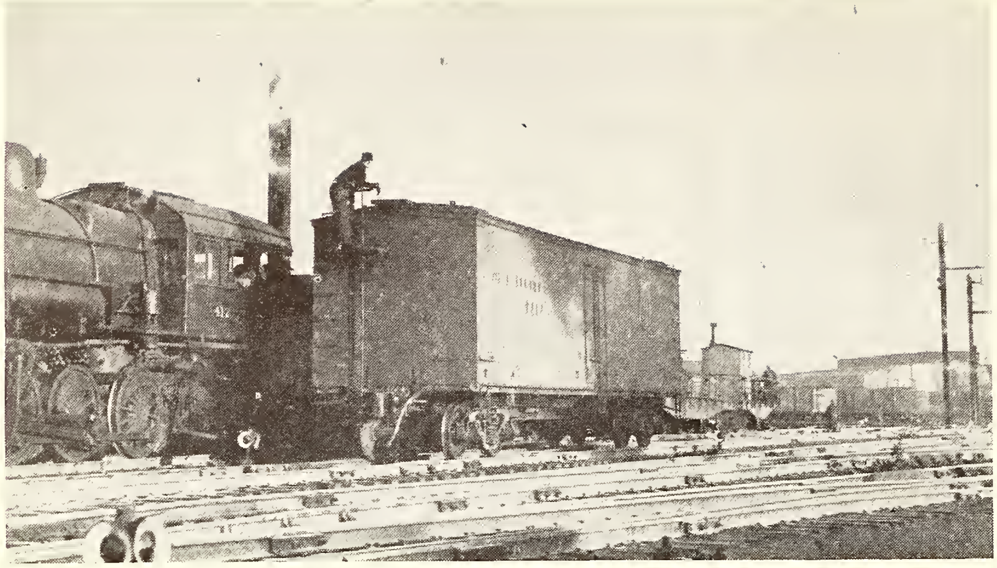
Finally, vegetable oils and compounds would have lasted from 30 to 60 days.

If you want a fresh view of the world, a writer once said, stand on your head and look at it carefully. That's called fresh perspective.

For a fresh perspective of New York (or any other urban center), however, there is another way of looking at the city. Instead of standing in the center of the town and regarding it as a city scene in Neon reds, Edison yellows, and smoke grays, try looking at it as the massive brain of an organism with a thousand reticulated arteries and nerves running through it.

Then if you try to ascertain the kind of blood that flows in the arteries, and the kind of impulses that tingle through the nerves, you will see that New York is a body fed by a half million full time farmers and farm workers. They pump the produce of 26

IT TAKES a half-million farm workers putting in a full day every day of the year to feed and clothe New York's consumers.



1

2

3

NEW YORK'S FOOD MARKET begins at "the hump" for 500 freight cars full of fruit and vegetables each day. Trains loaded with these foods for New York City are broken up at this elevated switching point (picture 1) in the Jersey Yards, across the river from the tall-towered Manhattan Island. From there cars coast down toward the Hudson River for floating across to the Manhattan piers on flat-bottomed, tug-propelled barges (picture 2). On the New York side, husky stevedores and porters break open car seals and haul the produce along a runway (picture 3) into a huge arc-lighted terminal shed for display.

million acres of land into New York City each year.

More than 28 million hens are needed to produce the 235 million dozen eggs New Yorkers eat each year. A herd of 1¼ million cattle go under the butcher's knife so New Yorkers can have their annual supply of beef; 1½ million calves, 3½ million hogs, and 5½ million sheep and lambs. It takes 2½ million cows to produce the 10 billion pounds (in terms of milk equivalent) of dairy products New Yorkers ingest.

By train, truck, and boat each year some 5 billion pounds (202,000 freight carloads) of fresh fruits and vegetables are routed into New York.

WASHINGTON STREET MARKET IS THE BOTtleneck through which 75 percent of these fruits and vegetables pass.

Each night the Washington Street Market undergoes a regular paroxysm. An average of 500 carloads of fresh fruits and vegetables a night pass through the New York market. On the eve of June 6, 1939 (to take a day) something more than 500 carloads of produce were delivered into New York: 133 carloads by truck, about 300 by boat, and the rest by freight. Trucks, 1,500 of them, jammed into the Washington Street Market.

There in an area 10 blocks long and 2 blocks wide are streets with space enough to accommodate 400 trucks. The trucks jammed from curb to curb, 3 abreast, unload their cargoes of food each night. Under the glare of street lights, men wheel hand trucks up and down the streets, threading their way between the traffic stalled trucks, unloading trucks from Georgia, Florida, North Carolina, Virginia, Pennsylvania, Ohio, and New York, while other men attempt to load city trucks waiting to haul produce to local stores and markets.

On the sidewalks beneath street-long canopies strung by wires from the half-century old buildings lining the streets, piled boxes of produce are heaped 2-men high. Between the piles of produce there is a narrow walk left, so that the sidewalk is hardly more than a catwalk between breastworks made of flat boxes of produce.

Crowds jostle between the high trenches of boxed fruits and vegetables. A worker pushing a hand truck loaded with a half dozen boxes of strawberries ploughs through buyers from chain stores, from corner grocery stores, pushcart peddlers looking for their day's supplies, buyers from hotels and restaurants.

Occasionally the buyers stop to inquire a price or to haggle with the white-coated produce dealers. When a deal is made, the dealers hastily make out a bill in triplicate, give one to the buyer, send one to a cashier, and attach one to the produce sold.

The buyer then threads his way between the piled produce inside the store front, pays the cashier, obtains a receipted bill, and, returning, shows the bill to a man with a hand truck. The porter loads the produce on his truck, obtains the license number of the buyer's truck, and then slowly trundles off through the mill of trucks and crowds to deliver the produce.

Unloading from trucks takes place in the Washington Street Market, but most of New York's fresh fruits and vegetables still arrive by rail.

ALL DAY REFRIGERATOR AND FREIGHT CARS arrived in the Jersey yards across the Hudson River. On arrival, switch engines chugged back and forth breaking up trains, cutting out cars, and then nudged them one at a time up to the hump in the yards, an elevated switching point. For a moment the cars tremble on the hump, and then another final nudge sends them coasting down through the framework of tracks toward the Hudson River.

At the bottom of the incline another yard engine bumps the cars about, pushes them around some, and then urges them onto flat boats, 8 to 20 cars to a float. By early evening tugboats maneuver their way between the barges, tie up to them, and then the waters of the Hudson swirling around them, barge and the tugboat, they swish across the river to the New York side where thousand-foot-long piers finger out into the water current. More maneuvering and finally the barges, loaded with cars, are lined up between the piers. Gangplanks are fitted into place. Swarms of workers trundle hand trucks up the pier to the cars, break open seals, push back the doors to release a blast of ice-cold air. Then, with back muscles straining, biceps tensing, leg muscles tightening, the men who do the work of unloading begin.

Fitting themselves between the shafts of their hand trucks, like human burros, the stevedores wheel the loaded hand trucks down the piers and into a great freight terminal, lighted by a spotlight, hung from steel-girdered ceilings.

In the arc light an occasional sea gull, bewildered by the lights, flutters its wings overhead. The stevedores unload their hand trucks and stack the produce in piles for sale.

Some of this produce is sold from these piles by wholesalers (carlot receivers) directly to buyers; some of it is piled up for inspection and sold later in the morning at auction.

Once sold, it is piled onto trucks or wagons pulled by horses, and hauled out of the terminal to go either a couple of blocks to the wedged traffic of the Washington Street Market, or else to buyers' trucks waiting outside the terminal.

Each year the tugging and hauling, the carrying and cross carrying, the catch-as-catch-can wrestling with fruits and vegetables from the time they arrive in New York until they reach the retailer, costs some $40,000,000. Of this, $2,000,000 represents spoilage and deterioration which could be eliminated in a more efficient market. About $17,000,000 goes for trucking, hauling, loading, and unloading, and a good part of this could be saved.

It costs 1½ billion dollars to market the billion dollars (farm prices) worth of fruits and vegetables produced in the country each year. Many people with an expert knowledge of the marketing of these products think this cost should be reduced. They wonder whether more fruits and vegetables could be delivered to more people at a lower total price with a higher return to farmers if bottlenecks like the Washington Street Market underwent some kind of corrective operation.

EACH WORK-DAY MORNING produce dealers, grocers, chain-store buyers, and hotel and restaurant operators assemble in the terminal auction rooms and bid furiously (picture 4) on the produce displayed downstairs on the terminal concourse. Knocked down at auction to the highest bidder, the produce on display is then loaded in drays and hauled anywhere from 50 yards to 2 blocks either to buyers' trucks or to the Washington Street market (picture 5). The fruit and vegetable bottleneck of New York City is the Washington Street Market, through which 75 percent of the 5 billion pounds of fruits and vegetables New York consumes annually must pass. It costs 40 million dollars annually to handle fruits and vegetables from the time they arrive in New York until they get to the retailer. A good part of this sum is lost in the hauling, the cross-hauling, and the confusion of the Washington Street Market (picture 6).

4

5

6

At the present time, with some such operation in mind, an informal committee of experts from the United States Department of Agriculture and from 3 or 4 State and city agencies is looking over the Washington Street Market.

IF SOME UNUTTERABLE (AND TOTALLY UNlikely) calamity should strike New York and cut off all the arteries that feed it food, there would be a double-edged disaster that would make Jeremiah look like an optimist.

How much food would be available in New York City was described accurately enough in the recapitulation of the Port Authority report on the threatened transportation tie-up of 1921. To bring that material down to date, suppose such a calamity had occurred during the night of June 5, 1939, which, the Weather Bureau says, was a beautiful clear night lighted by a silver scythe-like quarter moon.

The disaster would have left only 1 day's supply of milk in the city.

Menus on June 6 would have included all the fruits and vegetables that arrived in the city the preceding evening: apples, bananas, carrots, cucumbers, lettuce, onions, potatoes, tomatoes, grapefruit, oranges, peaches, watermelons, plantains, and pineapples.

Three meals on June 6 for New York's millions would have exhausted the supplies of avocadoes, artichokes, lima beans, snap beans, beets, broccoli, cabbage, celery, parsley, apricots, and plums by nightfall.

Cold storage plants could have been relied upon to supply a few days' supplies of berries, cherries, asparagus, beans, and spinach.

By the end of the week practically all fresh fruits and vegetables would have disappeared except potatoes, pineapples, and bananas.

Poultry supplies would have lasted 3 weeks.

There would have been bread for a month, but as all the important ingredients except flour ran out, the bread would have been debased in quality until it disappeared altogether.

In general such an if-hap would have left the city with food enough to supply a week's diet in an ever-narrowing range. After 2 weeks, there would have been little left except canned fruits and vegetables and black coffee.

But that would only be one-half the calamity.

If New York lost its food supplies, the food suppliers would lose their largest market for food.

THE TROUBLE THAT WOULD HIT AMERICA cannot be comprehended simply by saying that the half-million farmers and farm workers who work full time to feed and clothe New York would have become suddenly unemployed. Literally billions of dollars are invested in farms, railroads, produce houses, trucking lines, banks, boats, and highways for the sole purpose of feeding New York.

If, of a sudden, it ceased to be possible to feed New York, piles of produce would erupt mountain-high in every distribution center of the country; warehouses would bulge outward with surpluses; railroads and highways would be congested with undeliverable merchandise; prices of farm products would plummet toward bankruptcy. The food that's moved so expeditiously (by and large) through the arteries leading to New York would suddenly back up with glacial relentlessness.

The point is, there is an inescapable interdependence between New York and millions of farmers and farm workers all over the country, and it shouldn't be necessary to have a toothache for more people to realize it.

Foodlore and Facts

SCIENCE HAS A WAY of catching up on folk remedies and showing them up as fallacies. Sometimes, however, science looks into a folk remedy and discovers that some wise old observer has really hit on something.

Back in the 13th century, for example, when they burned witches every time there was an epidemic, they also used burned sponges to treat goiter. In the year 1819 scientists discovered that burned sponges contained iodine. More recently physicians and nutrition workers here learned through their work in clinics and laboratories that traces of iodine in the diet help prevent goiter. Whether any of the iodine from fumes had a beneficial effect on the people affected with goiter is hard to say. If it did, that's a score for the ancestors.

In the Middle Ages in Florence, while people still went down on their knees with terror every time there was an eclipse, pharmacists sold lemonade as a remedy for scurvy. Years later, in our own time, nutrition scientists proved that these pharmacists had hit upon something. Not only lemons but other citrus fruits are practical eldorados of Vitamin C. Of course, it is the Vitamin C in these fruits that does the sharpshooting against scurvy but even more importantly Vitamin C gives the body a substance it must have in sufficient quantity to keep well and vigorous. We now know that a medium-sized orange or half a large grapefruit gives us a large proportion of the Vitamin C we need for the day.

Folk fallacy, however, is the term applied to lore that doesn't bear up under scientific analysis. Take something like rich milk. Rich milk to most people means milk that's rich in fat. Skim milk, on the other hand, to most people means milk that is anything but rich. What they mean is that skim milk is not rich in fat.

But if you were talking richness in nutritional value, skim milk is anything but poor. Say the dietitians, it is just as rich as whole milk in protein and in the much needed calcium, and in all the other important diet elements contained, except fat and Vitamins A and D.

Because people don't prize it, skim milk is inadequately used, in some cases wasted, and thus consumers and farmers both lose out. Consumers lose out, of course, on an important source of dietary wealth, and farmers lose out because there is practically no market for the intrinsically valuable skim milk.

SCIENTIFIC investigation of vitamins was begun only some 25 years ago, but results have already revolutionized our understanding of the tremendous importance of balanced diets to human health and efficiency. Here a nutrition chemist in the BHE is measuring the Vitamin C (ascorbic acid) content of grapefruit juice.

1

2

3

4

5

CONSUMERS have their say at a Government hearing on how to get larger incomes for farmers and more milk to consumers. (1) This group spent many months learning about milk and preparing their case. (2) No lawyer, the group's spokesman, nevertheless, was able to present the brief the committee had drawn up. (3) ". . . the truth, the whole truth, and nothing but the truth." (4) One of Washington's largest milk consumers, attended by his mother, arrives. (5) Farmers and lawyers question the consumer spokesman.

Milk Consumers Speak Up

When hearings were held recently in Washington on a proposed marketing agreement for milk, producers and distributors were there, and so were consumers. Not often heard yet in business-government councils, organized consumers are beginning to learn their new responsibility to help in building for greater abundance

THE 2-YEAR OLD WHO TODDLED beside his mother into the hearing room was certainly no lawyer. And he obviously was neither producer nor distributor of milk.

What, then, could he be doing at a "hearing with respect to a proposed marketing agreement and proposed order regulating the handling of milk in the Washington marketing area?"

Classify him if you must as "Exhibit A." He was, as anyone could see, a milk consumer—probably the biggest potential milk consumer in that whole audience of lawyers, farmers, milk handlers, consumers, and Government representatives who had come together to discuss the price of milk paid to dairy farmers supplying the Washington area.

The hearing must have been the dullest thing possible for this young consumer whose world was one of teddy bears and toy blocks. But for him and his mother, what happened in that room had a lot to do with the future size of his glass of milk.

So important was their problem that his mother had asked for a chance to talk about it. She wanted to be a witness—a consumer witness—before this assemblage which for 3 days had been probing into the economic maze of "butterfat differentials," "individual handler pool," "Class I, Class II, and Class III of milk,"—and everything else that had to do with the marketing of this precious food from farm to city.

Only a beginner in the complicated economics of milk, there was one thing this young mother knew about milk. It had not been mentioned often in the 3 days of testifying and cross-examination. She knew that her budget and the health of her son depended a great deal on what the Secretary of Agriculture should finally decide was a fair price for the milk which distributors

bought from farmers in the outlying districts. As a consumer, she believed that if the price of milk went down, she could buy more; if it went up, she would buy less. That was her story—and it didn't take her more than 5 minutes to tell it.

SHE CAME, SHE SAID, AS THE SPOKESMAN for a group of her neighbors; women like her with children like hers who were very anxious to know how these hearings at the Department of Agriculture would affect the price they paid for a quart of milk.

"We read about this marketing agreement in the newspapers and we became rather alarmed to think that perhaps the price of milk, the price we are now paying for milk, might be more, if this agreement went through," she said. "We already pay more for milk than we can afford, and we need much more milk than we are buying.

"If the retail price of milk goes up," she warned, "we will have less, we will be able to buy less fluid milk, and we will have to buy evaporated milk; and if the price goes down, of course, we can have that much more milk."

With that, she sat down. The record doesn't contain the fact, but she had done her bit in helping to make consumer history.

She was one consumer who was facing realistically the fact that prices of goods consumers buy nowadays are not always decided over the counter by buyer and seller. Sometimes prices are decided long before goods come to market, and consumers have only the choice of paying the price or going without the goods. Sometimes it is government that steps in and fixes prices. When government does this, it usually does what industry does not do. It holds public hearings to which everyone interested is invited to come and speak their minds about what prices should be. From the testimony of people who appear at public hearings and from facts marshaled by experts, some government authority makes a decision about a price which people are required to respect.

THIS IS WHAT HAPPENS IN THE CASE OF milk that is sold by farmers across State lines. In 1933, Congress passed a law saying, in effect, that the marketing of some foods was in such a topsy-turvy state that the Government should do something about it. One of the things which Congress, in this law, decided should be done was to give the Secretary of Agriculture power to fix minimum prices which distributors should pay to dairy farmers who sell their milk from one State to another.

Congress laid down some rules and regulations about how this power was to be used. One of the most important was the rule that hearings should be held before any price was fixed, and that anybody who had an interest in such a price should be permitted to appear and give testimony. Another rule was that such testimony should be considered by the Secretary of Agriculture before he makes his decision about prices.

That's the law which drew this young mother and her 2-year-old into the auditorium of the Department of Agriculture a short time ago.

When she spoke her bit before the Secretary's representative, she was casting her vote on the prices proposed for farmers who supply milk to the stores and the homes of Washington's consumers. Before she ever appeared to testify she had been doing some tall thinking and exploring in the maze of milk economies.

IT STARTED MORE THAN A HALF YEAR AGO when a group of Washington consumers—some as individuals, others as representatives of clubs and civic groups—met one day to discuss the problem of milk in the District of Columbia.

Milk, they said, was an essential food—almost as essential as proper housing or an adequate transportation system to serve the city. They observed there were some Washington consumers, thousands of them, who either weren't buying all the milk they could use, or were suffering under-nourishment because of their inability to buy even a small percentage of the milk that nutritionists say grownups and children alike need in order to meet minimum health standards. They learned, too, that farmers producing milk for Washington's consumers were unsatisfied with the returns they got for their efforts.

Sixty minutes discussion on the whys and wherefores of this situation settled only one point: These consumers must be something more than round-table talkers if they were going to help untangle this baffling problem of getting more milk to more consumers and more returns to farmers. They must know more of the facts behind the scene. That is exactly what they set out to find.

FIRST STAGE IN THEIR QUEST FOR FACTS LED not to a farm but to the local offices of the City Health Department. There they learned the rules which the Health Department has laid down regulating the production of all milk that may be sold in the District. They found that some of these rules, while protecting the health of milk consumers, imposed heavy expenditures on the farmer for equipment and labor—expenditures that push up the cost of producing milk.

Discovering these facts led to questions. Such questions as these: Are the health regulations more stringent than necessary for health protection? Do they justify the expense to the farmers, and therefore the cost to consumers? Finding answers to these questions meant comparing Washington's milk regulations with those of other cities and setting them against the model law developed by the United States Public Health Service.

COSTS OF PRODUCTION ALSO HAVE MUCH TO do with the prosperity of the dairy farmers and therefore with the supply of milk available to consumers. There are feeds to be bought, barns to be built and maintained, equipment to be acquired and kept in condition, sometimes labor to be hired. These and other costs, they found, face the producer of milk and must be met before he can buy clothes for his family, if he is to stay in business.

From there the trail led to the distributing end of the set-up. Here, these consumer-explorers discovered something they had not known before. All the milk that came from a cow did not always bring the same price to the farmer. They found that milk was classified and paid for according to the use to which it was put by the dairy buying it: The highest price going for milk sold in bottles, a lower price for milk to be used in making cream, and a still lower price for milk to be used in other ways.

"Classification"—a new word in these consumers' vocabularies—had its advantages and disadvantages for the farmer, the investigators discovered, but what interests the farmer most is getting a good "blended"—or average—price for all the milk he sells.

PONDERING THIS PROBLEM, THESE CONSUMERS debated various ways by which this blended price might be raised. One way would be to increase the price of Class I milk, the kind used for bottling. But such an increase, while it might bring greater returns per quart, would most certainly reduce the number of quarts of bottled milk sold, they decided, since milk was already too expensive for low-income families. Higher prices, these consumers said, can actually mean lower income to farmers.

Just the opposite idea was then explored. How about a lower price for Class I milk, they asked themselves. Might not that result in more milk being sold at the Class I price, and less milk at the much lower Class II and III prices? If that happened, might not the average or "blended" price actually be raised?

These were not idle questions. The consumers who asked them earnestly went in search of the answers.

When the Secretary of Agriculture announced he was to hold a hearing on milk sold in the District of Columbia, they were on their toes, eager to give their testimony.

The law gives the Secretary power to call such a hearing when a group of producers request it, and also authorizes him to set minimum prices for the milk distributors buy from producers. Those prices, Congress said, should be high enough to insure an adequate supply of milk for the market, and to give the farmer a purchasing power equal to what he had over a designated period of years.

A FARMERS' COOPERATIVE IN THE WASHINGTON area asked for such a hearing to stabilize milk prices at approximately their current levels and do away with disorder in the market. They submitted a draft of their own proposals which were to form the basis of discussion by farmers, distributors, and consumers.

We would like, they said, to have 3 classes of milk, with prices legally set which must be paid by all dairies serving Washington to all farmers who sell milk to them.

Class I milk would include all milk sold to consumers as fluid milk, chocolate milk, or whole-milk drinks. For this, the farmers thought, $3.17 a hundredweight (or nearly 7½ cents a quart) would be a fair price.

Class II milk would be all the milk used for making cream, buttermilk, cottage cheese, and milk not used in either of the other 2 classes. For this they proposed $1.98 a hundredweight (about 4.3 cents a quart).

In addition, producers whose farms met certain standards would receive premium payments which would average about 33 cents a hundredweight on Class I and Class II milk.

Class III would be all the milk that goes into the manufacture of ice cream. Price of this would be determined by a formula based on butter prices.

Also, on Class I and Class II milk the producers proposed that an additional 6 cents per hundredweight, more or less, should be paid for each one-tenth of 1 percent of butterfat above or below 4 percent which their milk scored.

And, finally, the dairy farmers suggested that they would accept $2.71 per hundredweight (about 6 cents a quart) for Class I milk sold under a relief program to "low-income families, including persons on relief."

THAT, ROUGHLY, WAS THEIR PROPOSAL. The law does not provide for setting retail prices of milk, but consumers realized that a drop or a jump in the producer price might be reflected in their individual milk bills.

To this proposal, the dairies who bottled the milk and distributed it to consumers offered a counter-argument. First, they asked that flavored-milk drinks be taken out of Class I and be included in milk sold as Class II. And in Class III, they wanted to include all milk not specifically used for the purposes set up in Class I and Class II.

They also asked that price of the Class I milk be cut to $2.71 a hundredweight—a cut of about one cent a quart—in the spring when feed costs would go down for the farmers. "The handlers feel that this reduction should be made in order that consumers may have the opportunity of purchasing milk in the Washington market at 1 cent per quart less than that now in effect," their brief said. But the dairies themselves did not indicate they were ready to cut prices to consumers further by reducing their own margin.

For Class II and Class III milk they asked no set price but suggested two separate formulas dependent on the price of butter in Chicago, and the price of Philadelphia sweet cream.

Milk for relief families should be priced at $2.71 until the spring months and then cut to $2.25, the dairies declared. They asked that "low-income groups" be withdrawn from the relief milk proposal "because of the difficulty in determining what constitutes low-income groups."

THIS, THEN, WAS THE SITUATION WHICH faced the consumers when it came their turn to say what they felt should be done to protect the consumer end of the milk stream and to increase the sale of milk.

They went into the hearing armed with the results of all their months of investigating. They did not presume to be experts or authorities on the subject of milk. They were the first to concede their apprenticeship. But they had made a start, and from that beginning they set out to convince the others that

HERE ARE three little pictures of what goes into the price of a quart of milk. First, there is the farmer who must be paid for his labor and the upkeep on a herd of cows. Then comes the dairy which pasteurizes the milk and puts it into bottles. And finally, there is the cost of delivering the bottled milk from dairy to doorstep in time for breakfast. Many consumers believe that on the distributing end of the setup there is the most room for economy.

consumers had as big—if not bigger—an interest in the ultimate outcome of the hearings as anyone else. As he is authorized to do, the Consumers' Counsel, of the Department of Agriculture, offered them advice and help when that was needed.

Like the producers and distributors, they presented their own brief, giving their views and arguments on the proposed marketing agreement, as it would affect consumers. They gave facts on the consumption of milk in the city. They pointed out that milk prices had decreased less than the prices of other foods from 1931 to 1939. They told the hearing that in only 10 out of 120 milk markets was the price of a quart of milk higher than in Washington, and made the point that sales were likely to fall under the pressure of high prices, while population figures were going up. They warned that evaporated milk at 7 cents a can was displacing much of the farmers' market for fresh whole milk.

When it came time to advance their solution for Washington's milk problem, they proposed as one measure that producers accept a cut of 1 cent a quart in the price paid producers for Class I milk. To such a proposal, the producers were quick to protest. But the consumers defended such a price cut by maintaining that a lower price would mean greater sales.

"We sincerely believe," they argued, "that any program on behalf of Washington consumers of fluid milk can be made also into a program on behalf of producers. And we are convinced that a continuation of present methods of pricing and selling milk in this city will deprive many consumers of milk they need, will drive increasing numbers of them to use evaporated instead of fluid milk, and will create conditions in this market that will make it increasingly impossible for milk producers to make a decent living."

THEY MAINTAINED THAT THE PRICE OF A quart of milk could be cut by as much as 3 cents in Washington "by methods by which dealers in other cities handle milk at lower margins than those in effect in Washington." As a starter, they told dealers that (1) milk sold in stores should be priced at 2 cents a quart less than the price of milk delivered to the door; (2) discounts should be allowed for milk bought in quantity; (3) half-gallon or gallon containers and alternate delivery days be provided so as to permit economies in delivery; (4) the local milk ordinance should be revised so as to remove the restrictions that are costly to farmers and are unnecessary to assure protection to consumers; (5) a bottle deposit and paper containers be provided so as to lower handling costs; and (6) distributors should accept a narrower margin in order to increase total sales.

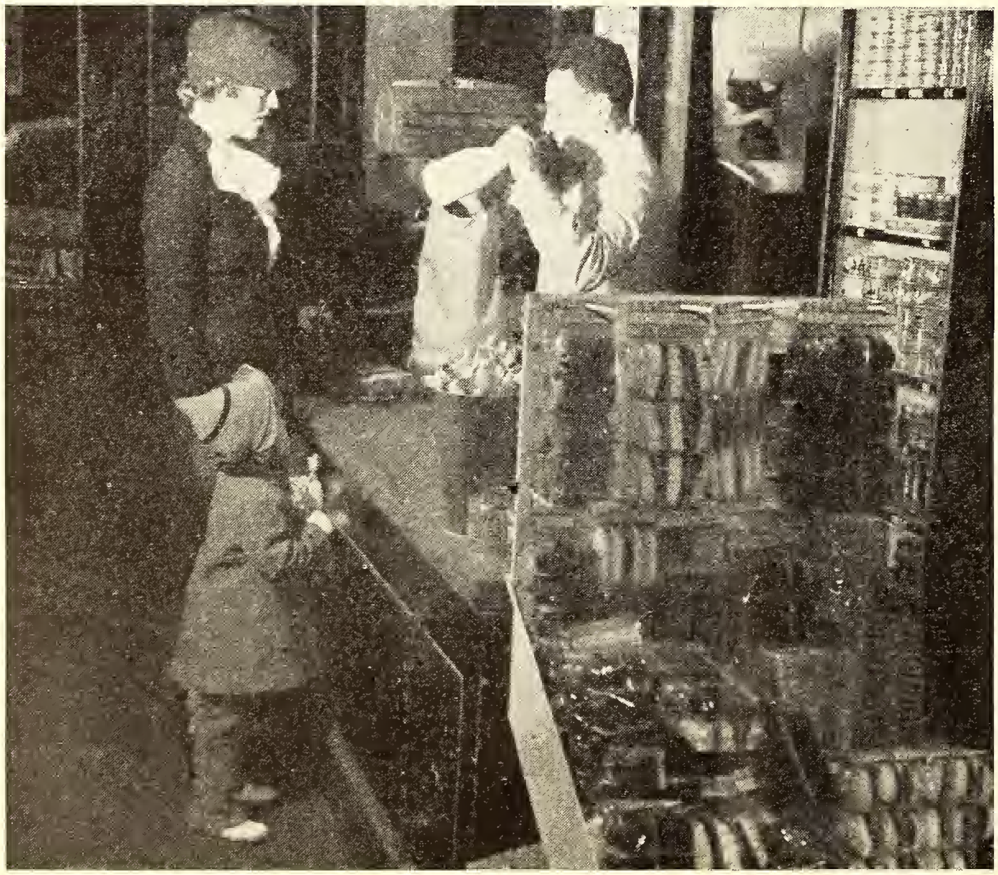
Increasing the sales of milk is just as effective a method of increasing income to farmers as keeping up the price of milk to consumers, their argument concluded.

Like the others, these consumers were questioned and cross-examined on their evidence, and asked to amplify certain points.

This was their testimony. Consumer testimony. Against it, the record showed the testimony of producers and distributors. It remained now for the milk experts of the Department of Agriculture to summarize and add their recommendations, and then to turn the record over to the Secretary of Agriculture for final decision.

Perhaps the proper climax of this story is the Secretary's decision, telling who won what. But the hearing and the milk order provide another climax to this tale. They dramatize the new rôle consumers are playing in the Nation's and community's economic affairs.

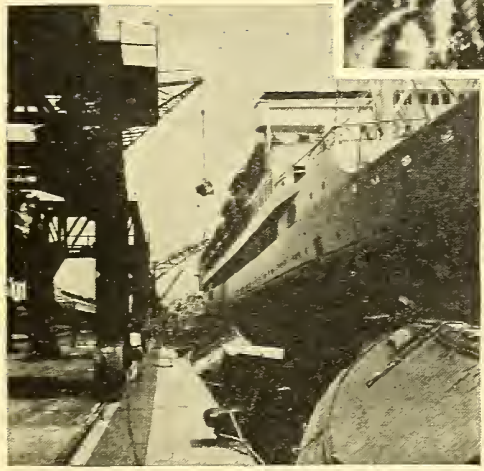
DISTRIBUTION COSTS for milk sold over the counter are less than for milk delivered to the doorstep. These economies should be passed on to consumers through lower prices for over-the-counter milk according to the housewives who testified at the Washington hearing.



NEARLY 5 YEARS AGO, THE SECRETARY OF Agriculture stated in a broadcast: "It has been one of our disappointments that so few consumers, either in person or by representatives, have taken part in the many hearings the AAA has held. . . . I assure you that the problem of administration would be much simpler if these producer programs could be discussed at the hearings by representative, fair-minded, unprejudiced consumers."

Slowly but surely consumers are now showing an awareness of the need for their speaking up whenever producers and distributors get together with government to decide questions affecting the price consumers must pay for goods and services, or the quality of those goods and services, or the quantity of goods and services that come to market.

In support of this new expression of consumers, the Secretary has said: "I think consumer organizations will not only add to their own accomplishment but will help different groups to find out how they can work together. . . In all of this (the effort to attain continuous balanced expansion of production) it seems to me that organized consumers can be a very real help . . . I am convinced organized consumers will play a larger and larger part in the national scheme of things."



Inside the Coffee Pot

The Food and Drug Administration stands guard at American ports of entry to protect America's coffee pot from adulterated coffee

TEA HAS AN HONORED PLACE in American history but coffee played a role, too, in the founding of the United States. In the year 1774 a group of patriots in New York City, members of the Committee of Correspondence, gathered in the Merchants Coffee House, a block from the docks where the high-decked, tall-masted merchant vessels lay at anchor in the harbor, and drafted a letter to a group of Boston patriots in which a union of the American colonies was proposed.

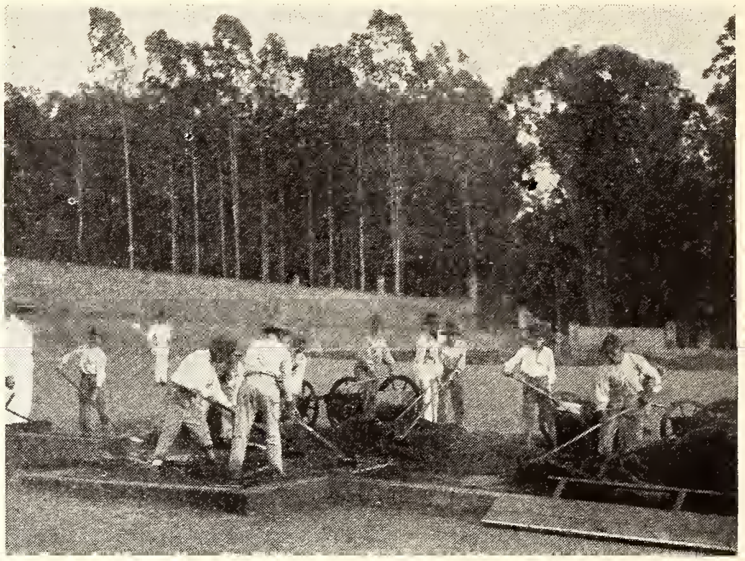
Fifteen years later the Merchants Coffee House was decked out in flags. Down the street the harbor was filled with small boats flying the bright new flag of the United States. Inside the coffee house a group of solemn men, some of whom had helped draft the letter back in 1774, arranged themselves formally in anticipation of the moment when General George Washington would ride up to the coffee house, and step down to hear the official greeting which awaited him as President-elect of the United States of America.

COFFEE IS HISTORIC, YOU MIGHT SAY, AND the historic dates have a curiosity value. First mentioned in literature sometime around the year 900 by an Arabian physician, coffee, according to legend, was first used as a beverage in 1258.

Not until 1625 did it become known that sugar has its merits in a cup of coffee. Then in 1660, the Dutch ambassador to China ingeniously thought of adding milk to his sweetened coffee.

An American scientist, Count Rumford (Benjamin Thompson), invented the percolator in 1806.

For Americans, perhaps the most important other date in coffee history is 1906, the year the Federal Food and Drugs Act was passed.



MEN, WOMEN, AND CHILDREN gather the ripe reddish purple coffee cherries on coffee plantations throughout the tropical and subtropical world during most of the year. After picking, the coffee is cleaned, washed in streams of water, permitted to ferment, dried, hulled by machine, bagged, and finally loaded onto ships.

Long before this Act was passed, some ingenious sharper first discovered that coffee could be adulterated with chicory. Chicory has its partisans. There are many people who believe that chicory added to coffee improves its flavor. There are others who prefer chicory to coffee. Concerned less about flavor and more about the profits to be clipped by adulterating coffee with chicory, some dealers before the passage of the Food and Drugs Act in 1906 mixed the 2 and sold the mixture with no mention of the chicory content.

Nor was chicory all. A New York newspaper in 1890 estimated that between 96 and 120 million pounds of bogus coffee were sold each year in the United States at an annual profit of 18 million dollars to the sophisticators. One factory produced an imitation coffee from rye flour, glucose, and water. The most successful imitation coffee factory produced 10,000 pounds of pseudo-coffee a week.

In the United States, January 1, 1907, marked a New Year and a new deal for the coffee consumer. On that day the Federal Food and Drugs Act took effect and the result was quickly apparent in the Nation's coffee pot.

Coffee substitutes could still be sold after the law was passed (and can be sold today), but after the food and drugs law began to operate they had to be sold as coffee substitutes and not as coffee.

The decisive role the Food and Drug Administration played is apparent in its rulings. An early ruling, for example, kept out of the United States coffee from Europe and other places which had been coated with lead chromate and similar poisonous chemicals to improve its appearance.

It also became illegal to import into the United States blackjack coffee, that is, coffee of a very low grade with a large proportion of decomposed beans.

Any practice, in fact, which tended to make coffee appear to be better than it was, or which concealed inferiority, was put on a legal unfair list.

Finally, misrepresentation of the variety of coffee offered for sale was also forbidden.

Java and Mocha, for example, are highly venerated coffee names and before the Food and Drugs Act was passed almost anything that resembled coffee was called Java or Mocha coffee.

After the passage of the Act, Java coffee meant coffee which was grown on the Island of Java, while Mocha coffee meant coffee which was grown in the province of Yemen in Arabia.

One corner cutter, after this ruling, called a blend of coffee he sold, Javocha. When hailed into court he admitted that his coffee had never seen either Java or Arabia. Instead he explained to a skeptical judge and jury that Javocha was an acrostic which honestly and carefully told consumers where the coffees in the blend originated. JA, he said, stood for Jamaica; V for Venezuela; O for Colombia; CH for Chiapas, a State in Mexico; and A—here the acrostic broke down for A stood for Guatemala.

Prior to the passage of the Food, Drug, and Cosmetic Act of 1938, there was no definition of coffee in law, nor did the Food and Drug Administration have authority to establish one. As a basis for its proceedings against adulterated coffees, the Food and Drug Administration did issue a regulation which defined coffee, but this definition was only advisory and had no legal weight.

Under it the Food and Drug Administration announced that it regarded coffee as the "seed of the cultivated varieties of Coffea arabaica, Coffea liberica, and Coffea robusta."

Green coffee, it understood to be raw, unroasted coffee, while roasted coffee was considered properly cleaned, green coffee which "by the action of heat (roasting) has become brown and has developed its characteristic aroma."

Under the new food, drug, and cosmetic Act of 1938, the Food and Drug Administration may promulgate a reasonable definition and standard of identity, a reasonable standard of quality, and/or reasonable standards of fill of container which do have the force of law.

The staff of the Food and Drug Administration is limited, however, and the number of food products are many, so that to date the Food and Drug Administration has not got around to fixing standards for coffee, though, in due time, it probably will.

While the Food and Drug Administration has established no minimum quality standards for coffee, as part of its routine activities it keeps an eye on all coffee imports.

Coffee, after it is imported, also remains under the surveillance of the Food and Drug

COFFEE FILTERS into the United States through the gangways of ocean-going steamers, like this one, at the rate of 2 billion pounds a year. If everyone, man, woman, and child, got an equal share that would make 15 pounds (unroasted) apiece. More than half this coffee comes from Brazil. Second and third largest coffee suppliers are Colombia and El Salvador.

Administration so long as it remains in interstate commerce.

Recently an inspector in New York City, making his rounds through one of the fragrant warehouses in the spice and coffee district, encountered 100 bags of coffee which contained what the Food and Drug Administration called an excessive number of worthless beans. On information supplied by the Food and Drug Administration, the Federal district court ordered this coffee held for trial. At the trial the owner of the coffee turned up and admitted the coffee was below par. The court then ruled that he could have his coffee back provided he sieved out the bad beans and destroyed them. Pending the destruction of the inferior coffee, the importer posted a bond.

TWO BILLION POUNDS OF COFFEE EACH YEAR are tablespooned into America's coffee pot—so aromatic in the morning. More than half these 2 billion pounds of coffee are hauled down the sides of the great Brazilian plateau to the ports for shipment to American cities. From April to August, men and women slowly work their way from coffee shrub to coffee shrub, gathering the ripe red coffee cherries in sacks or baskets or pails. The coffee cherries grow in clusters around the base of the stems of bright green, oval leaves on shrubs which range from man-height to three times the height of a man. Like other tropical trees the coffee shrub bears flowers, green fruit, and ripe fruit all at the same time. During picking season only a few of the honeysuckle-like white flowers remain; enough, however, to fill the dry plateau air with a faint jasmine scent.

After the coffee is gathered, the red skin of the coffee cherry is removed along with a fruity pulp and a silvery parchment to disclose two green coffee beans. These beans, polished, sorted by sizes, and sacked, are the coffee of commerce.

In the United States the coffee is poured out of its sacks into other sorting machines where further sizing takes place, and then by suction it is carried along to a milling machine which cleans it. Some time later different varieties of coffee are blended together by dealers' formulas, and then the coffee is roasted in perforated cylinders which rotate before a furnace giving off a steady heat. This is the brown, genial Humpty-Dumpty looking coffee bean consumers know.

COFFEE ISN'T BOUGHT FOR ITS FOOD VALUE. Before the ancient Arabians discovered that a stimulating flavorful drink could be made out of it, they ground it up, rolled grease into it, and ate it. That way it was a food. Today, however, people look to fruits, vegetables, meats, fish, and dairy products for food, and know that coffee brew has no food value. Those who use cream and sugar in their coffee, of course, have added a little food value, mainly calories. But all that the coffee drinker asks of coffee is that it be stimulating, fragrant, and flavorful.

Roughly these virtues in a cup of coffee depend upon the variety of the coffee, the way it is roasted, its freshness, and the way it is made.

FIRST PERSON to greet a bag of visiting coffee in the United States, after it passes customs, is an inspector from the Federal Food and Drug Administration who rejects all inferior and adulterated coffee.

Of these four criteria, paramount factors are freshness and the method of preparation.

Coffee, by American usage, generally falls into two classifications: Brazilian coffee and mild coffee, the word mild here meaning not gentle or bland, but rather anything that isn't Brazilian. As a matter of import statistics, it means coffee from Colombia, El Salvador, Mexico, Guatemala, British East Africa, and Venezuela, the six next most important sources of America's coffee after Brazil. To a lesser degree it means coffee from the Dutch East Indies, Arabia, Puerto Rico, Hawaii, and most of the other regions that fall between the tropics of Capricorn and Cancer.

BY FLAVOR AND SAVOR, COFFEE DIVIDES again into four general classes: neutral, sweet, acidy, and bitter. Taking these tastes as compass points, brown Bogota coffee from Colombia, brown Santos from Brazil, and most of the East Indian coffees usually lie in the bitter region of the taste map.

The rich, heavy-bodied, fragrant Mocha coffee is the acidy arch-type, while Mexican, Costa Rican, and Guatemalan coffee fall in the same taste constellation.

The run-of-the-crop Brazils are neutral-flavored while the Brazilian red Santos, the Haitian, and Santo Domingo coffees are sweet.

As a matter of cup practice, however, coffee is not sold straight. Coffee blenders, men with sensitive palates and noses trained to detect subtle fragrances, take different varieties of coffee and combine them to get a

[*Concluded on page 15*]

COFFEE BLENDERS with educated palates and noses trained to respond to delicate fragrances combine the different varieties of coffee into the blends consumers finally measure out for their morning coffee.

YOUR FOOD SUPPLIES AND COSTS

BEFORE WAR BROKE OUT in Europe America's food basket was costing consumers less than it had cost for practically 5 years. Some foods were cheaper than they had been since 1933.

When war was declared, consumers felt the shock in higher costs for some important foods. Prices of meats, fats and oils, cereals, dried beans, and sugar moved up. Lard prices jumped the most—35 percent. Sugar and dried beans advanced the next largest amounts—25 and 20 percent.

Eggs and dairy products moved up, too, in the fall, but they usually do at that season.

Both pressures lifted the cost of foods in general 5 percent in the short space of one month.

Then came the turn. It started in late September and kept up through mid-January. By that time, food costs had dropped to about 3 percent above their pre-war level.

Not all foods joined this downward price parade. Flour and canned salmon, after their first jump in September, continued to move up slowly. Evaporated milk advanced in price about a half cent a tall tin. Bread prices increased in a number of eastern cities in January. Prices of most dairy products and vegetables advanced seasonally through the early winter months.

Other foods not only lost all of their September increase, but in January actually cost less than before the war. Prices of pork, beef, and lamb dropped considerably after September.

Still other foods, between these two groups, lost some of the September increase, but not all. Lard and sugar and canned tomato prices in January were only a little above their pre-war level. About half the September increase in navy bean prices had been canceled.

Even in years when there is no war pressing on food supplies, food costs are usually slightly higher in midwinter than late summer. Dairy products, eggs, and vegetables, for instance, help to push up winter costs. So with January's food basket costing 3 percent more than last August's, it is still low compared with other Januarys since the depression. In fact, this January's costs are below those of any January since 1934.

For every dollar workers spent for food in the 3 years 1923–1925, they spent only 77 cents to get the same foods in January 1940. Back in January 1929, the same foods cost $1.03. In January 1933, they cost 63 cents.

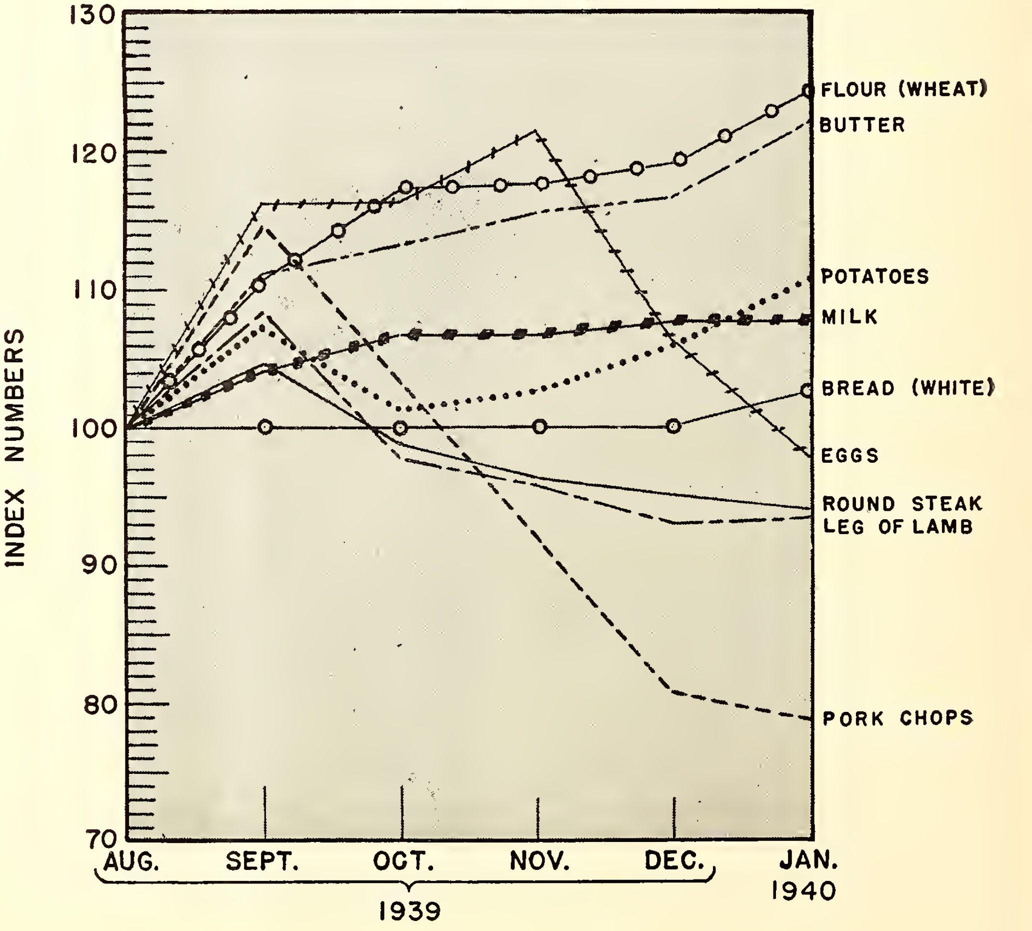
As we go to press, reports come from the South telling of damage done to winter vegetables by freeze. During March, most of our home-grown tender vegetables come from this area. The ones which have been most severely damaged are snap beans, tomatoes, peppers, new potatoes, and cucumbers. Of course, when freeze badly cuts down supplies of most winter vegetables, the country draws more heavily on foreign-grown produce, and on canned and frozen supplies.

More meats are expected to come to market in March and April than came a year ago. The big increase will be in pork products and better-grade beef. Consumers could buy a pound of pork chops at an average price of 23 cents in February. This meat hasn't been as cheap as that in February since 1933. Lamb supplies will be about the same as in March and April 1939. Lower-grade beef will probably not be as plentiful.

As to fruit supplies, citrus crops also were hit by the freeze of late January. In fact the damage is expected to cut remaining supplies of winter oranges about a third under a year ago. Grapefruit supplies were hurt to about the same degree. Summer oranges which come to market mainly after mid-May were not affected by the freeze, and they are expected to be a little less abundant than in 1939.

Scarcity of strawberries on markets during February was entirely due to this freeze which punished the South. More berries will come to market in March and April, but city markets will not see as many as a year ago.

A CLOSE-UP OF FOOD PRICE CHANGES SINCE WAR WAS DECLARED



HERE ARE THE FIGURES

Now you can complete the charts on food costs which appeared in the October 15, 1939, issue. Using these figures, continue the heavy black lines showing on each chart on pages 14 and 15. This line represents the average actual cost of each food throughout the country.

Food	*Sept.*	*Oct.*	*Nov.*	*Dec.*
	Cents	*Cents*	*Cents*	*Cents*
Eggs, 1 doz.	38	38	40	35
Round steak, 1 lb. .	38	36	35	35
Pork chops, 1 lb. . .	35	32	28	25
Lard, 1 lb.	13	12	11	10
Milk, 1 qt.	12.5	13	12.5	13
Butter, 1 lb.	34	35	36	36
White bread, 1 lb. .	8	8	8	8
Potatoes, 1 lb.	2.4	2.3	2.3	2.4

Cost of living figures for December 1939 have just been released, also, so you can complete the charts on pages 14 and 15 of the November 1 issue. These figures are percentages. Each one represents a comparison with 1925–29 costs, which stand for 100. When you draw each bar for September and December 1939, note that the bottom line starts at 60.

Item	*Sept.*	*Dec.*
Food	75.1	73.1
Clothing	84.9	85.6
Rent	70.7	70.7
House furnishings .	89.0	90.2
Fuel and light	86.0	87.1
Other things	97.0	96.7

INSIDE THE COFFEE POT

[*Concluded from page 13*]

flavor that more or less meets with consumer approval on different price levels.

Coffee distributors try successfully to keep the quality of their blends constant from year to year. By manipulating the kinds of coffee they use in their blends they can keep the final blend steady even when the supplies of a particular constituent of their blend fail.

Blend of coffee, however, is only one of the factors in an acceptable cup of coffee. A second factor, not necessarily second in importance any more than the blend is first in importance, is the roast.

Before roasting, coffee is simply a fibrous, almost flavorless, tough, indifferent kind of product with practically none of the virtues coffee connoisseurs hymn. It's the roasting that loads the bean with its fragrance, that makes the coffee district in a city aromatic, the people in the neighborhood nostalgic, and the bean crisp and brown. During the roasting the heat induces a series of wonderful changes in the chemistry, the color, the smell, and the size of the coffee bean. Smoke shimmers up from the roasting, the beans begin to swell and sweat oil, some of the caffeine in the beans is transformed into gas and driven off. Water is evaporated from the bean. Sugar in the bean caramelizes to give the bean its brown color. The caffeine, sugar, and the substances called caffeinic acids in the coffee blend together to form an oil which chemists, for lack of precise knowledge, dub caffeol, the source of the coffee fragrance. Corresponding to rare, medium, and well done in meat, the coffee roasts are light, cinnamon, medium, high, city, full city, French, and Italian, depending upon the length of the time the coffee is roasted, the temperature, and the degree to which the coffee is agitated.

Under-roasted coffee makes a flat brew, with a wry green flavor. Over-roasted coffee tastes burnt and bitter. Generally, the darker the roast, the less caffeine the coffee contains, and the more pungent the brew.

The kind of roast you get depends upon where you live. Along the Atlantic seaboard a medium-colored roast is the rule. On the Pacific coast you're likely to get a light roast. In the South you'll probably get coffee roasted very dark.

Until coffee is roasted, aging actually improves most varieties. After roasting all coffees begin to deteriorate. The aroma and flavor of coffee are due, of course, to the compounds resulting from the roasting. After roasting and grinding, however, these volatile compounds dissipate themselves in gas. It has been estimated that after 2 weeks, for example, when exposed to the air half the strength of coffee evaporates.

Actually, in kitchens no one computes the age of the coffee, so once it is bought, the coffee that is served gets progressively worse until it is used up. On the other hand, if an attempt were made to maintain the flavor of the coffee by increasing the amount used, the caffeine content would rise as the dose increased because while the coffee flavor goes up in gas, the caffeine remains.

Senile coffee, that is ground coffee over 2 weeks old and exposed to the air, also has another disadvantage. After a while substances in the coffee begin to oxidize, producing an off flavor which, however, is not harmful.

Short of roasting and grinding coffee at home, there are a number of ways to win out against the hazard of stale coffee.

You can inquire around until you find a store that sells freshly roasted coffee. In that case, you don't have to insist on vacuum packing, but if you do that you should be sure not to buy more than 3 or 4 days' supply of coffee at the most. It may cost a little bit more to buy the smaller quantity but the cost per cup of coffee in the end will be less.

Theoretically, coffee kept in a cold place should grow stale slower than coffee kept in a warm place. Actually, no experiments have verified this theory. It isn't necessary, therefore, to keep coffee in the refrigerator, but it is not a good idea to keep coffee on the shelf above the stove where the container is likely to get heated.

Guiding principles in coffee making are few. First the coffee pot must be clean, immaculately clean, despite the labor-saving myth to the effect that rinsing is enough for a coffee pot. Second, measure the coffee and water carefully, and once you have found the combination which suits your palate, stick to it. Third, the coffee should not be boiled. Boiling drives off aroma and the flavor which are the fundamentals of coffee taste, and the longer coffee boils the more bitter and less fragrant it becomes. Properly made "boiled" coffee is really steeped, that is, the boiling water is poured over the coffee and kept hot, but not by boiling, until the desired flavor is obtained.

Experts say the best way to make coffee is by the drip method, a method in which water that has been heated to the boiling point is poured or permitted to drip over finely ground coffee. Something else to recommend this method is the fact that it produces a better brew with less coffee.

IN THIS ISSUE

MARCH 15, 1940 ● VOLUME VI, NUMBER 12

The Physiology of a Great City . . . 3
Foodlore and Facts 6
Milk Consumers Speak Up 7
Inside the Coffee Pot 11
Your Food Supplies and Costs 14
Here are the Figures 15
(To complete charts in October 15 issue.)

U. S. GOVERNMENT PRINTING OFFICE 213712

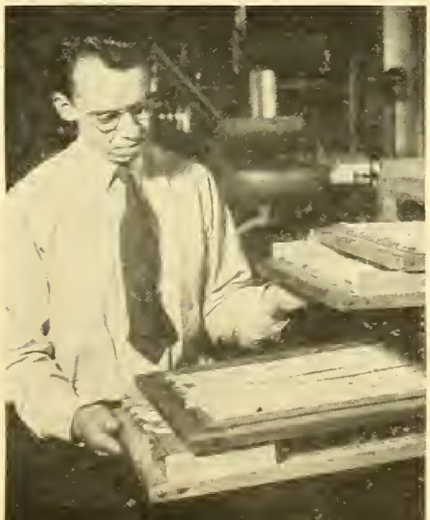
U. S. F. S. RECEIVED
LIBRARY
APR 24 940

COTTON STAMPS

CONSUMERS' GUIDE

APRIL 1, 1940

UNDER-CONSUMPTION



WHEY PRODUCTS

DRUG WARNINGS

FOOD SUPPLIES

CONSUMERS' GUIDE

APRIL 1, 1940 VOLUME VI, NUMBER 13

A Publication of the
Agricultural Adjustment Administration
Consumers' Counsel Division
D. E. MONTGOMERY, Consumers' Counsel

Issued Semi-monthly
(Monthly during June, July,
August, and September)

Address all inquiries to the Editor,
Consumers' Guide, U. S. Dept. of Agriculture
Washington, D. C.
MARY TAYLOR, Editor

STANDARD MAKING for consumers under the provisions of the Food, Drug, and Cosmetic Act of 1938 has stepped up to factory speeds, recent reports from the Food and Drug Administration reveal.

The output in recent months, for example, included one order which defined standards of identity for 40 different canned vegetables, ranging across the vegetable spectroscope from artichokes and asparagus to truffles, turnip greens, and turnips. In between are old familiars like lima beans, green beans, and mushrooms.

Kohlrabi failed to get a standard set for it, since it was found that it is not canned commercially.

No standards of identity were set either for canned mixed vegetables, for it was learned vegetables for canning are not mixed in any fixed proportion, hence there were no trade practices or consumer expectations to guide the Department of Agriculture in reaching a definition. Cans of mixed vegetables, therefore, under the law, will have to bear labels which list all the vegetables they contain.

A second order set standards of identity and of fill, and a standard of quality for canned peas, while another set similar standards for canned apricots, cherries, and pears.

Notable features of the pea standards include the requirement that they be labeled to tell consumers when they are excessively discolored, artificially colored, when they contain excessive foreign material, when they are excessively broken, or cracked, when they aren't tender, and when they are too mealy. Canned peas that aren't filled up to within 3/16 of an inch of their tops must warn consumers of this fact on their labels, while glass containers must bear warnings if their contents don't reach within a half inch of the container top.

Cans of pears, apricots, and cherries are required under the standards of fill promulgated for these fruits to be filled as full as possible without injury to the products. If they aren't filled to the limit their labels must say, "Below Standard in Fill."

Labels must tell when canned apricots are not tender, when halves or quarters are excessively small, when they are mixed in size, blemished, unevenly trimmed, or partly crushed or broken.

Similarly canned cherries which are imperfectly pitted, or which are too small, or which come in mixed sizes, or which are thin-fleshed or blemished, must indicate such defects on their labels.

Canned pears, likewise, must bear label warnings if they are inferior in any of 7 different ways.

All 3, apricots, pears, and cherries, may come packed in water, their own juice, or in one of 4 different strengths (or weights, or sweetnesses) of syrup; light, medium, heavy, or extra heavy. However, the label must tell consumers which packing medium is used.

Finally these 3 canned fruits may be seasoned with vinegar or spices, or both, but whatever is used must be indicated on the label.

Anyone who wants more information about these standards, or who would like to offer suggestions on the standard making for other foods, is invited to write to the Food and Drug Administration, Department of Agriculture, Washington, D. C.

WHEN SPRING CAME to Blank Town, warming the days but leaving the evenings cool, Johnny Consumer and his wife began to talk about closing down the furnace and building a fire in the open fireplace. It would take the right amount of chill off the air in the evening. Since Johnny in this case was a newcomer in the little town in Missouri, he began to call various distributors of coal and wood, getting prices and attempting to compare values as any good consumer should. He supposed, in all innocence, of course, that wood was sold by the cord. At least, he had learned in school that a cord was a certain measurable amount of wood. He couldn't really remember exactly just what the amount was, so he looked it up in the dictionary. Oh yes, he remembered now . . . "cord, a cubic measure used especially for wood cut for fuel, now legally, U. S., a pile 8 feet long, 4 feet high, and 4 feet wide."

He began to telephone. "Yes, we do sell wood."

"How much does it cost by the cord?"

"We don't sell it by the cord, mister. We sell it by the load. We get $3.00 a load for it."

"Well, how much is a load?"

"A load is a rick."

"What is a rick?"

"A rick? Why, a rick . . . everyone knows what a rick is."

"I'm a stranger in this part of the country, and I'm afraid I don't know how much a rick is. Is it a part of a cord?"

"I don't rightly know, mister. All I know is that it's a right good lot o' wood."

"What are the measurements of the rick?"

"I don't exactly know, but it's all the wood that will go on the back end of a pick-up truck, and that's a lot."

"Three dollars, you said."

"Yes, that's right."

"All right, thanks." And he hung up the phone.

He tried another distributor, with approximately the same answer.

No one knew the dimensions of a cord. No one sold wood by the cord. It seemed that in this part of the country, a person bought a "load" of wood or a "rick" of wood, and paid the price asked. There was no opportunity to compare cost, since no one could tell him how much wood was included in the "load" or the "rick." How could he, as a good consumer, know whether he was getting his money's worth? He couldn't, and he didn't!

The estimable and erudite Mr. Webster notwithstanding, there is no legal standard which holds throughout the United States defining a cord of wood.

Federal statutes governing the purchase of wood by the Government define a cord as measuring 128 cubic feet. But no Federal statute defines a cord for commercial purchases.

Some States, counties, and cities, nevertheless, lay down the law on cords of wood. Where they agree with the definition suggested by the National Bureau of Standards in its model weights and measures statute, they require a cord to be 128 cubic feet. At least two States—Minnesota and North Dakota—vary the dimension for sawed and split wood.

Where there is no legal standard, the custom sometimes is to trade in "face cords." A face cord is a pile of wood 4 feet high, 8 feet long, but the depth depends on the thickness of the wood.

Consumers find buying of wood difficult in the midst of this confusion.

Stamp Planning for Cotton

Following the trail blazed by blue food stamps, now come brown cotton stamps to weave cotton surpluses into cotton goods to give relief to cotton growers, jobs and wages to workers, and clothing and household articles to the needy

IF THE SHIRT TAILS on the shirts of 400 million Chinese were made 2 inches longer, some homespun shirt-sleeved economist once drawled, the world cotton surplus problem would be solved.

Long ago, however, most people learned that you can't get far on someone else's coat tails and a shirt tail won't carry you half as far as a coat tail.

There are no 2-inch answers to the cotton problem; there aren't even any 2-inch methods to describe the problem. Calling the dynastic difficulties into which King Cotton has fallen "a problem" over-simplifies the tangled skein of difficulties besetting cotton. It would be as if you referred to all of the things that must be solved in the United States—from getting more money for a local weights and measures bureau up to finding employment for all the unemployed—as "the American problem." That wouldn't be illuminating enough to light a match.

First of all, there are 10 million persons, living on 1,600,000 American farms, who owe an economic allegiance to cotton. Most of these 10 million people live in 10 States: North and South Carolina, Georgia, Alabama, Tennessee, Mississippi, Louisiana, Arkansas, Oklahoma, and Texas. The troubles these 10 million people are in add up to a major part of the sum that the President has called the Nation's Economic Problem No. 1.

Economic troubles can sometimes be measured by the smallness of incomes, or their nonexistence. In the 10 cotton States, income per person from 1924 to 1935 averaged $184 a year. In good years it was more; in bad years it was less. But for all the 10 million cotton subjects in the 10 cotton States, bad years came more often than good years, while even good years were called good only because people had seen worse.

Since 1910, the 10 million have been continuously beset with trouble in one shape or another: boll weevils, periodic low cotton prices, the gradual tragedy of eroding land, the loss of foreign markets as the result of the collapse of international trade, the competition of new land planted to cotton in Brazil and China, and Russia and Uganda, in the Sudan and in Turkey, in Peru and Chosen, and recently, loss of cotton markets to synthetic fibers.

can be made to maintain desirable levels.

Foreign markets for American cotton must be retained where they still exist, and regained where they have been lost, since 60 percent of America's cotton production is normally exported. This is being sought by financing exports, by seeking agreements with other cotton-producing countries, and finally, through trade treaties which open up the doors of foreign countries to American cotton.

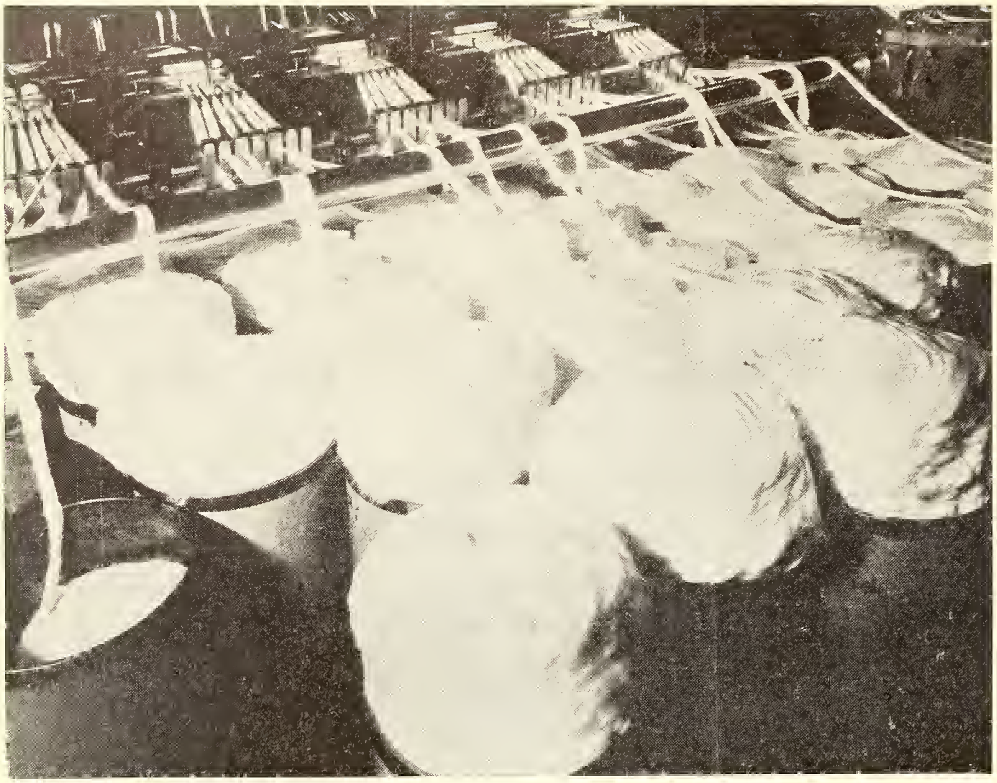
Where the soil has been worked out altogether, leaving families stranded in regions too sterile to produce livings, resettlement programs, financed by Government loans, are under way.

MOST RECENTLY A NEW TACK HAS BEEN taken in a direction which has been under exploration by the producers of foods and their city consumers. Reports of the first experiences in this new direction were so proudly and widely hailed by consumers, farmers, and businessmen, that the Department of Agriculture is giving cotton a push the same way.

The stamp plan that has been used to turn troublesome farm surpluses into health-giving meals for city consumers is now going to be put to work for cotton producers and cotton consumers.

Blue stamps, as almost everyone now knows, enable needy families in over 3 dozen cities to better their diets not only in amount but also in kind. To get these stamps, which are good for the purchase of foods designated as surplus, families must buy one dollar's worth of orange stamps a week for every member they have. The orange stamps are food stamps, too, but they buy any food or household article that's usually sold in a grocery store. In some cities where families on relief get food purchase orders instead of cash, the 50 cents' worth of blue stamps a week are given without the orange stamps entering onto the scene at all. Whichever method is used, however, the blue stamps enable underfed families to build up their diets toward better health. And, of course, the extra food in the diet is food that was otherwise material for headaches on the farms.

BROWN STAMPS NOW ARE TO BE USED TO generate purchasing power so underprivileged consumers can buy cotton goods just as the blue stamps already generate food purchasing power for these consumers. Department of Agriculture economists look to these brown stamps to send thousands of America's ill-clothed into stores to take part in white sales of cotton clothing and house-



WHEN BUSINESS booms cotton consumption sometimes goes up to as much as 31 pounds per person per year, and when business slumps cotton consumption sometimes drops as low as 18 pounds per person per year. Cotton stamps are designed to pull more cotton off the farms through the mills and into the homes of families who otherwise wouldn't be able to buy enough cotton clothing or cotton household articles.

Cotton threads its way through the whole of industry. It's in rubber tires and explosives. Cotton belts turn the motors in factories. There are 90 pounds of cotton in an automobile. Its seed furnishes shortening for bread, cakes, and pies. It curtains windows, clothes millions, and furnishes the basic material for moving-picture film.

Thus cotton trials are joined with those of industry. Good business years in the United States have not necessarily in the past meant good cotton years, but bad times in industry almost inevitably drag on the cotton farmer. Just as an industrial depression coils through the whole of America, a continuing regional depression recoils to affect everyone no matter where he lives. That was what the President meant when he said the South was the Nation's No. 1 Economic Problem. When the families of cotton farmers can't afford to buy clothes, workers in cotton mills lose out on jobs. When cotton families can't afford sanitary facilities workers in the factories that produce porcelainware and pipes and bathtubs and fixtures lose out on employment.

FOR 20 YEARS THE CONSUMPTION OF COTton goods in the United States has bobbed up and down between a ceiling of 31 pounds per person and a floor of 18 pounds. The hills and hollows, as you would expect, correspond with the hills and hollows on a chart indicating business conditions. In 1938–39, when all the bales of cotton produced were counted up, there were 11,676,000 of them. This mountain of cotton, added to a carryover of 13,712,000 bales constitutes an enormous surplus of American cotton over the world need for American cotton.

HOW TO BALANCE COTTON PRODUCTION against cotton consumption, and even more important, to fill up the economic and social swamps that years of misfortune have created is the Nation's concern, as well as the South's. Plans which the 10 million people in the cotton economy are following today involve a great deal of cooperation by a great many people on many sectors.

First there is a plan for soil conservation. There is a cooperative program for planning the total amount of land to be devoted to cotton each year, and a reenforcing plan which provides for limiting the amount of cotton to be marketed when cotton surpluses get out of hand. Then there are devices called "cotton loans" and "price parity payments" which shore up incomes until they hold supplies of a kind that no January has ever seen.

Before the cotton stamp plan is put into effect finally, it will be tried out experimentally in a few cities to find out just how it works and get a record of actual operation.

Cotton stamps, which come in 25-cent denominations, are to be sold to families receiving public assistance (families on relief, getting old-age pensions, blind pensions, mother's pensions, or families with wage earners on WPA).

As in the case of the blue food stamps the brown cotton stamp plan will operate on voluntary good will. Families can take part in the plan or not, as they wish. If they decide to go along, they will be permitted to purchase a minimum quantity of stamps every 3 months. Then for every dollar's worth of cotton stamps they buy, they will get a dollar's worth of cotton stamps free. If they want to purchase more than the minimum amount of stamps they may do so up to a specified maximum.

THE MOST AND THE LEAST STAMPS A FAMILY can buy depends upon its size. Thus one- and 2-person families will be able to buy a $4 book of stamps every 3 months for which they would pay $2, or a $6 book for $3.

Three- and 4-person families every 3 months will have their choice of 3 books of stamps: a $6 book for $3, or an $8 book for $4, or a $10 book for $5.

Families with 5 or more persons will be able to go shopping at white sales every 3 months with $8, $10, or $12 books which they have purchased for half these amounts.

These stamps will be good for the purchase of any new garment or household article made entirely of American cotton in American factories. Just as the blue food stamps may be spent in any grocery store, the brown cotton stamps may be spent in any store selling cotton goods.

Retailers who receive these stamps in trade may cash them at their banks, with their wholesalers, or at the office of the Federal Surplus Commodities Corporation in their city. This Corporation is the agency of the Department of Agriculture which directs surplus removal programs.

FAMILIES BUYING THEIR COTTON CLOTHING with brown stamps will be permitted to save up the stamps they buy in one 3-month period to add to their next 3 months' supply of stamps so they may make larger purchases. When they appear for stamps at the beginning of the third cotton stamp period, however, they will have to turn in the empty stamp book containing their first supply of stamps to get more stamps. Thereafter, every time they buy stamps they will have to turn in the stamp book in which their next to last allotment of stamps came.

Stamp purchase days during the year will not come all at once every 3 months. That would create peaks and valleys in sales that might upset usual marketing procedures. Instead stamp sales will be staggered through the year so they will be feeding purchasing power for cotton goods into a community evenly the year round.

Going behind the scenes directly to the offices of the Federal Surplus Commodities Corporation reveals how the brown cotton stamp plan took its final shape. To make it fit the problem of too much cotton on the farms and too few clothes on people's backs, the FSCC had first some practical questions to answer. How often should stamps be sold? How many stamps should a family be required to buy? What would families buy with the stamps? How many free stamps should be given with the stamps the families buy with their own cash? Then there was a two-pronged question which had to be answered—would needy families take part in the plan and would the all important businessmen cooperate?

To get the answers to some of these questions, the FSCC posed them to families on relief; families with wage earners on WPA; retailers, bankers, and the officials of trade associations.

IF FAMILIES with incomes of less than $1,000 a year could buy as much cotton goods as better-off families with incomes of from $1,000 to $1,500, the additional purchasing power would add $153,000,000 more to the incomes of the men and women who man the cotton industry, beginning with the farmer and including factory workers, retail clerks, and workers in the transportation industries. That's the idea behind the cotton stamps.

FIRST OF ALL, THE FSCC LEARNED, LOW INcome families have so many expenses pressing upon them that clothing purchases are made only when money can be snatched away from some other use. A man's shirt, a cotton dress, towels, sheets, don't have money earmarked for them, in very low budgets. Instead they are pushed aside by rent, or food, or carfare, or medical care, until they can't be stalled any longer. When that time comes, money is almost surreptitiously taken out of the rent fund or the grocery bill and hastily spent for the needed clothing or household articles. Purchases like these, the FSCC describes as spasmodic. Since there is no regular purchase cycle, the FSCC, to make things easy administratively, decided upon the 3-month period.

FSCC investigators asked WPA and relief families in 6 cities: "How much did you spend on cotton clothing and household articles last year?"

Most frequent answer went like this: "I'll have to think. The sheets gave out altogether last spring and I had to buy 6 of them. They cost 69 cents a piece. Then I bought some yard goods, and I made this dress and a dress for my little girl."

Answers from all families interviewed including families that bought no clothes or household articles at all, showed first that those with wage earners on WPA spent more money for cotton articles than did families on relief. That checked with what the FSCC expected.

A family of 2 on WPA spent an average of $30.23 a year on cotton articles for clothing and the house. Relief families spent only $9.87 through the year.

Families of 4 on WPA spent an average of $23.28, while the relief families of the same size spent $17.84. Six-person families on WPA spent $33.21 compared with $23.09 for the relief families.

Statistics such as these aren't infallible measures of the normal purchases of cotton goods by such families, the FSCC warns, since memories are likely to be faulty, but they are close enough to indicate how meager is the share which millions of low-income families have in existing and potential supplies of cotton goods. These figures check in a general way with a study which was made of the expenditures of American families on cotton articles during 1935–36. In this study, it was learned that a nonrelief family of 4—man, wife, and 2 children—spent $17.90 during 1935–36 for cotton articles if their income was less than $500. When their incomes got above $500 but stayed below $1,000 the average expenditure on cotton articles rose to $27.37. The average family of 4 with an income between $1,000 and $1,500 spent $36.73 for cotton articles.

The FSCC people put these statistics down before them. Along side they put other figures: The number of families in each of the 3 income groups. Four million had incomes of less than $500. Another 8 million had incomes of $500 to $1,000. These 2 groups accounted for 2 out of every 5 families in the country.

Digits can start day dreams. Suppose these 12 million families had their incomes lifted to the level of families with incomes in the next higher bracket: $1,000 to $1,500. What would that do to their purchases of cotton goods, assuming, of course, that the 12 million would spend as much on such products as do the 7 million with incomes ranging from $1,000 to $1,500? Cotton mills would hum. But how much?

When the figuring is all done, what emerges is this: About $153,000,000 more would pour into the shops and through the mails to mail-order houses and into the hands of the people who make and sell cotton goods and the raw materials for cotton goods. However, like the extra 2 inches on the Chinaman's shirt tail, the cotton stamp plan in itself will not solve the cotton farmer's problem. As a matter of fact, out of every dollar spent on the plan only 10 to 15 cents will go to the producer of raw cotton. But, of course, every little bit helps.

To step up cotton purchases that much would mean one of two things: Either incomes would have to be hoisted to the higher level, or some device would have to be worked out to give lower income families the extra cotton-purchasing power they would have and use with such larger incomes. Accomplishing the first would take a great deal more than day dreaming. It would need Herculean efforts on many fronts. But for the second, here was a device to hand: The stamp plan, operating within the limits of funds made available by act of Congress to aid in the distribution of surplus farm commodities.

Goal of this stamp plan is to give sub-$1,000 families the cotton purchasing power of $1,000 to $1,500 families. A first task in transforming plans into purchases was to estimate how many brown stamps should be given away to each family so that the total operation would benefit all in fair degree and give the cotton economy the extra corpuscles it needs for healthy existence.

Final calculations produced the 4-6-8-10-12 dollar books of cotton stamps that are now due to go on sale at half price every 3 months. Of course, even precise calculations may turn out to be wide of the mark; that's one reason why the brown cotton stamp plan is being tried experimentally first.

Toward the end of their exploratory conversations with families on relief, the FSCC investigators discovered answers to still another question: Just what do these families need right now in the way of cotton goods?

The answers came in a rush: Dresses, underwear, nightgowns, coats, yard goods, shirts, socks, trousers, overalls, sheets, pillow cases, towels, bedspreads, mattresses. All of those things except mattresses and coats, they had been buying, but not in sufficient quantity. Mattresses and coats, they claimed, were so expensive they never had enough money to buy no matter how much they needed them.

Final question, of course, was: What would the family think of a cotton stamp plan?

Out of 20, 19 families said: "We use the blue food stamp plan and swear by it." As to whether they were for a cotton stamp plan, the answer to that was practically unanimous; 98 percent of the families said "yes."

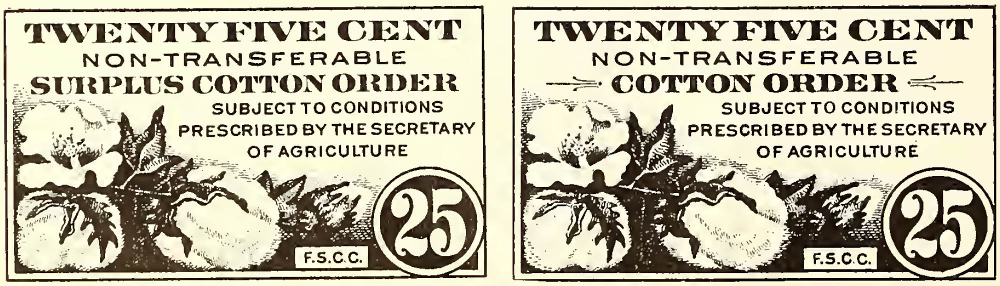
Finding out whether businessmen were for the brown cotton stamp plan was easy. When the time came to talk to the businessmen, it developed that they had seen the food stamp plan work and they were already making preparations to ask for a cotton stamp plan. The businessman offered one suggestion. We'd like the stamps to be good for the purchase of as many kinds of clothing and household articles as possible, they said, and we would want the plan to operate with the same simplicity and freedom from bother that is typical of the food stamps.

That was the way the FSCC felt, too. Now with the preliminaries concluded, the cotton stamp plan is under way.

Soon in selected cities there will be white sales of cotton goods, made from cotton produced in America and spun, woven, and sewn by American workers.

Brown cotton stamps can buy clothes for the needy, give work to the unemployed (half of the price of cotton articles goes to wages), and lend a hand to the 10 million people of the 10 Cotton States.

BROWN COTTON STAMPS (1) good for the purchase of 25 cents' worth of American-made cotton goods will go free to families receiving public assistance if they purchase an equivalent amount of **GREEN COTTON** stamps (2) which will also purchase 25 cents' worth of American-made goods in any retail store. Stamps will come in 4-6-8-10-12-dollar books which will cost the families buying them half as much as their value in a retail store.


TWENTY FIVE CENT
NON-TRANSFERABLE
SURPLUS COTTON ORDER
SUBJECT TO CONDITIONS PRESCRIBED BY THE SECRETARY OF AGRICULTURE
25
F.S.C.C.
TWENTY FIVE CENT
NON-TRANSFERABLE
COTTON ORDER
SUBJECT TO CONDITIONS PRESCRIBED BY THE SECRETARY OF AGRICULTURE
25
F.S.C.C.

Let's Wipe It Out!

by Milo Perkins

President, Federal Surplus Commodities Corporation, U. S. Department of Agriculture

"This nightmare of under-consumption is the black plague of the 20th century; we've got to make up our minds to wipe it out—with a vengeance," says Mr. Perkins in this first of a series of articles on some of the things America must do to black out this black plague

FOR THE FIRST TIME we are beginning to know about under-consumption in terms of simple arithmetic. Our farmers make up 25 percent of our population, and yet they get only 11 percent of our national income. They are producing more than they can sell in the present market at a profit. Surpluses of agricultural products have been a serious national problem now for over a decade. As I see it, there are three major causes behind this situation:

The first is the application of science to agricultural production. Briefly, we have learned how to make 2 blades of grass grow where one grew before, and we don't know where to sell the extra blade of grass. Yields of lint cotton, for example, are now 35 percent greater per acre than they were 10 years ago. Yields of corn in the 10 corn-belt States during the years 1936–1939 were 23 percent above the 1929–1933 average.

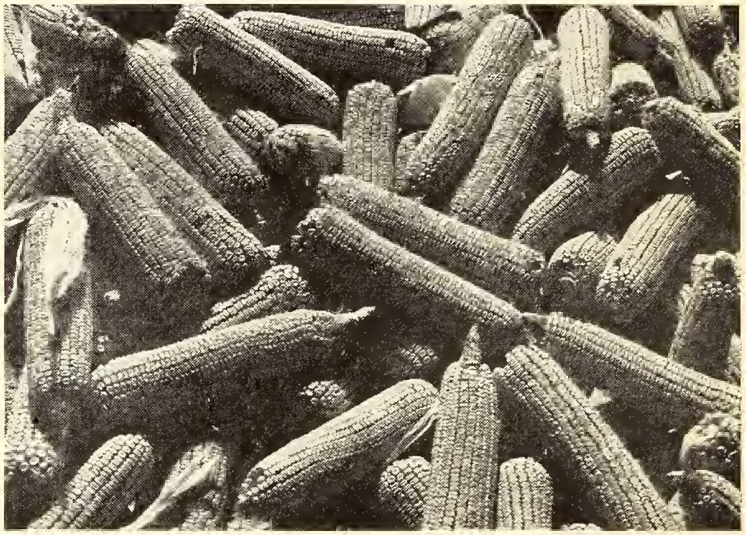
Secretary Wallace recently stated this scientific progress in another way. He said: "One hundred fifty years ago it required 19 people living on the land to support themselves and one person in town. Today, under greatly commercialized and industrialized conditions, one person on the land supports himself, three people in town, and contributes to the support of another person overseas."

All this is a tribute to our technological genius as a people, and we may well be proud of it. Some day we'll turn that genius to solving the problems of under-consumption. When that day comes, the extra blade of grass will add to human happiness and not to human misery. For the first time in history, we're suffering because we've got too much of the things we need most. The science of production has out-run the science of distribution. We've got to catch our breath—and catch up.

The second cause of our farm surpluses has to do with dislocations in foreign trade. Naturally, our export crops have been hit the worst. This goes back more than 20 years ago to the time when we changed from a debtor to a creditor nation—to the time when we plowed up 40 million acres of

"WE'VE BEEN smart enough to make tractors and mechanical corn-pickers and dial telephones; are we smart enough to find work for the folks they've thrown out of work?"

"EVERY YEAR there is a net increase in our working population of about 500,000 persons. Over half of the 10 million folks who want work but can't get it belong to this group."



"WE HAVE learned how to make 2 blades of grass grow where one grew before, and we don't know where to sell the extra blade." Corn yields per acre in 10 States in 1936–1939 were 23 percent greater than in 1929–1933.

grasslands and ruined part of the Great Plains in an era of military hysteria. Wheat helped to win the war. Then came the time when the armies of the world were demobilized, and our farmers lost their markets for the crops they had been raising on those forty million acres.

Following that, one country after another entered the frantic race to have its cake and eat it, too. Every major nation in the world tried to sell all it could abroad and buy as little from other countries as possible. We were in the race from the beginning; part of the time we were out in front. Tariffs were raised; imports and exports were licensed; foreign exchange was blocked; food was produced under government subsidies within certain countries at over twice the cost of producing it elsewhere.

In the long run, the present war seems certain to hurt our agricultural exports. When the war is over, things are likely to be even worse. We'd better not dodge the facts. It's still a habit with us to refer to France and Great Britain as our sister democracies. But in the rough and tumble of a war fought on the economic as well as on the military fronts they are finding it necessary to put their economics on a totalitarian basis just as fast as they can, particularly so far as international trade is concerned. They are employing the same economic weapons which Germany has been using for several years. As a matter of self-preservation, they are fighting fire with fire; its a part of the death struggle in which they're engaged. Before it's over, however, the American farmer is likely to get badly burned in the process. Belligerents as well as neutrals are resorting to centralized controls of their foreign trade.

Great Britain, for instance, is doing more than to buy all the food she can from within her own empire so as to conserve her dollar exchange for other purposes. She is buying large amounts of agricultural products in countries which normally sell to Germany, and she is doing it vigorously as a part of her economic offensive. For example, she has bought huge quantities of tobacco and dried fruits from the Mediterranean countries in addition to the fresh fruits which were available. The tobacco farmer here at home, and the producer of raisins and prunes and apples and winter pears has lost his best customer. His exports have been savagely curtailed. Only quick and heavy government purchases, as well as loans, have kept him from realizing fully just how serious a blow has been dealt him. The war is bringing about dislocations in foreign trade which may last for a generation or longer. Following our own Revolutionary War, for example, we changed from a nation of tea drinkers to a nation of coffee drinkers, and the habit is now 150 years old.

Barring a miracle of brotherhood and vision at the next peace conference, we are likely as a nation, to find ourselves in a world loath to give up its barter economies. Having surpluses of both farm and city goods ourselves, we may find it extremely difficult to trade with other countries in such a world. Right now, of course, they can give us gold for our surplus of exports over imports. The country seems to think it's all right to swap three and a half tons of fuel oil for an ounce of gold. If the war lasts, however, we'll have most of the world's gold, and just what other nations will use for money to buy the things they want to buy from us no one seems to know. We could, of course, act like a creditor nation, and accept goods from them in exchange for what we need to sell them. Whether or not our various pressure groups will continue to oppose a real expansion of foreign trade remains to be seen. Heretofore, they've all wanted increased exports; but as far as increased imports were concerned—they've wanted those to take place in the other fellow's backyard. It looks now as though there's trouble ahead for farmers who have been selling a substantial part of their crops abroad.

THE THIRD AND LAST MAJOR CAUSE OF FARM surpluses, as I see it, has to do with industrial unemployment in our own country. Farmers producing dairy and poultry products, and fruits and vegetables as well as meats, have been hit the hardest. These are the foods low-income folks start buying as soon as they get a little more money. The term "surpluses," as applied to these foods, is simply a smug, polite name for a shocking amount of under-consumption. During last December we virtually reached the 1929 level of industrial production, and yet some 10 millions of the unemployed were still with us. No intelligent person can look those figures in the face and reach the conclusion that the unemployment problem is going to solve itself. Every year there is a net increase in our working population of about 500,000 persons. Over half of the 10 million folks who want work but can't get it belong to this group.

Better than half of the balance are said to have lost their jobs to machines. Industrial output per worker is said to have increased around .20 percent in the last 10 years. We've been smart enough to make tractors and mechanical corn-pickers and dial telephones; are we smart enough to find work for the folks they've thrown out of work? Upon our answer to that question—not in words, but in new jobs—hangs the future of our industrial democracy. In other lands it has lost its race against time; if we have the courage to make it work here, then we shall in truth be a chosen people.

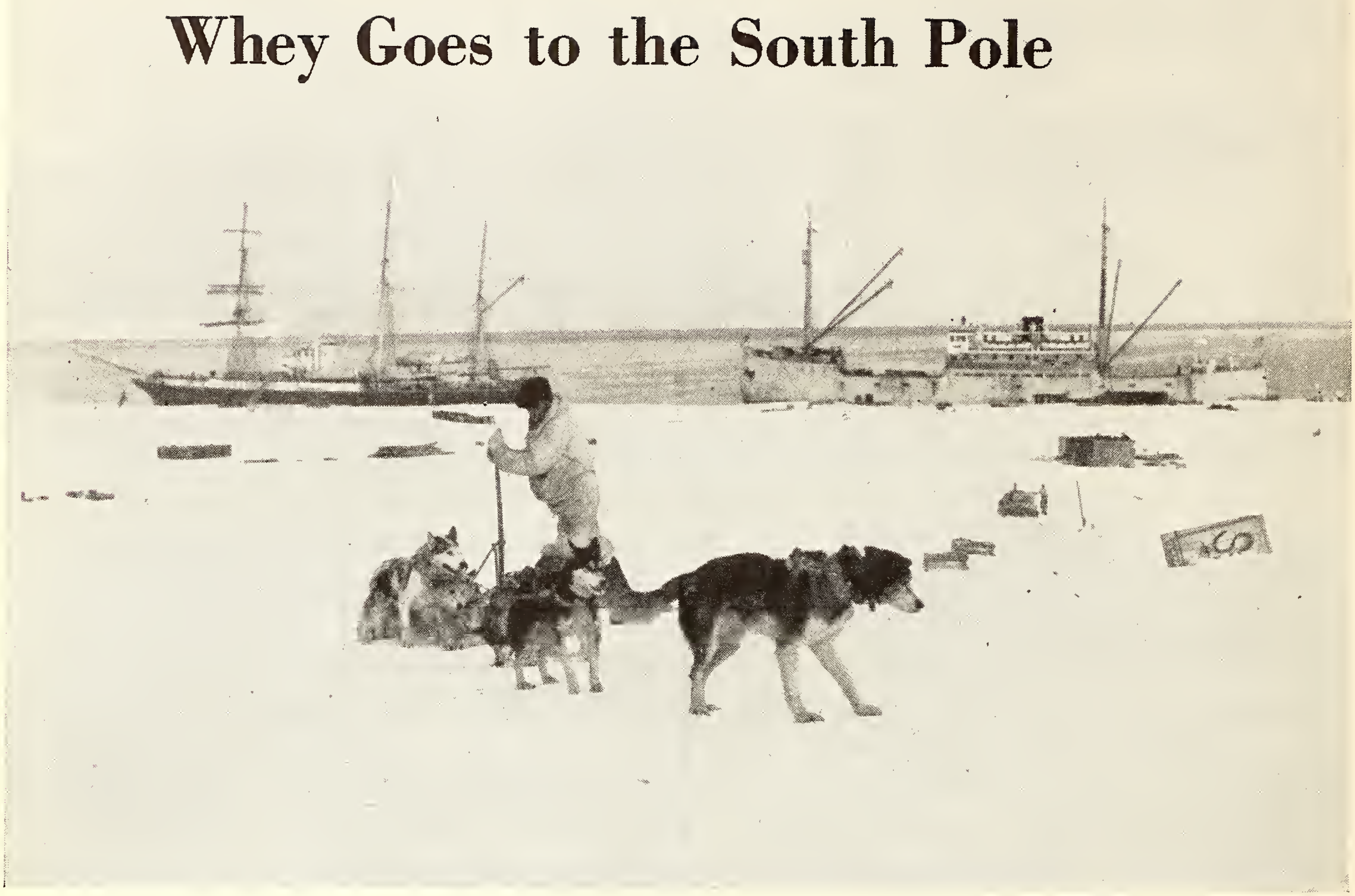
Personally, I think we can, and that what we need most is a re-direction of our genius as a people. Heretofore, we've concentrated on methods of efficient production. Henceforth, we must concentrate on efficient and business-like methods of increasing domestic consumption no matter how much violence it may do to some of our pre-conceived notions. We know how to produce almost anything—but we haven't learned how to distribute such things to the jobless who ask only the chance to work for them. This nightmare of under-consumption is the black plague of the 20th century; we've got to make up our minds to wipe it out—with a vengeance. Only one thing can stop us and that's a mental sit-down strike—a kind of smug, 19th century faith that things will work themselves out if only we don't do anything about it.

"FARMERS producing dairy and poultry products, and fruits and vegetables as well as meats, have been hit the hardest (by industrial unemployment). These are the foods low-income folks start buying as soon as they get a little more money."

WE MUSTN'T LET THAT HAPPEN. IT WON'T, if we keep our eyes glued to the goal of fully utilizing all of our resources—and if we keep marching until we get there. We can have full employment in this country within a few years, but we've got to fight for it. If we slash out at under-consumption within our own country as we would at a foreign enemy, individual initiative and free enterprise will come into their own as they never have before. That's the only way in which we can be sure of their continuance. That's the only way I know of to assure a 19th century chance of opportunity to youngsters who are growing up to run the 20th century.

We've got to restore confidence in this country—the confidence of our young folks—not by platitudes, but by jobs. And we've got to do it—not for just a few of them, but for all of them who are willing and able to work. Any answer short of that is unworthy of the men who fought their way westward for us and our children. There's a job of internal pioneering ahead of us which has barely been started. The full conquest of under-consumption still belongs to our tomorrows.

Whey Goes to the South Pole



When a little group of Americans "down under" gathers for mess they'll be eating some good tasting new foods made with valuable nutrients in milk that now go to animals or are wasted. Experiments by the Bureau of Dairy Industry show how these nutrients can be turned to good use for Americans at home

WAY DOWN in the deep, deep south, that is, in the vicinity of the South Pole, the hardy explorers in the Antarctic Expedition will probably drink a toast in whey soup to a slightly less dauntless forbear, Little Miss Muffet. Or perhaps they'll mull over the incident of the spider while they chew a whey caramel or nibble a piece of whey fudge.

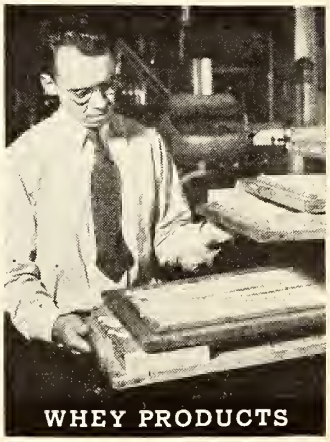
These whey foods, which stem from little Miss Muffet's curds and whey, have been loaded into the holds of the *North Star* and the *Bear,* the two ships in the Antarctic Expedition, to nourish the Antarctic Explorers during their sojourn at the bottom of the World.

Along with the whey products the Expedition will also eat skim milk potato wafers, and canned American Cheddar cheese which doesn't form a rind, dry out, or shrink.

All these dairy products—the whey candy, the whey soup, the canned cheese, and the skim milk potato chips—came out of the scientific laboratories of the Bureau of Dairy Industry of the Department of Agriculture.

But these foods are newsworthy not only because they are going to the South Pole. Even if they had stayed at home they would have merited notice. For right now they demonstrate that the Federal Bureau of Dairy Industry has at last worked over the major hump toward a solution of the problem presented by the enormous waste of the valuable nutrients in milk.

When a child fumbles with his glass of whole milk, and finally, urged on by his mother's eye, drains the last drop from the glass, he is getting all of the valuable nutrients in milk.



WHEY PRODUCTS

But if his mother lets him skimp the milk in the hope that the butter on his bread will take its place, he loses many of the nutrients that milk contains. For in butter making the chief nutrient which comes through in substantial amounts is the milk fat, with its not-to-be-sneezed-at quotas of Vitamins A and D. Milk on its way to consumers, however, through a butter creamery loses most of its protein, most of its lactose, and not enough of its mineral ingredients are left to be worth mentioning.

Cheese is a concentrated nourishing dairy product, but in the manufacture of it, too, some valuable milk nutrients go by the board. Each year between 4 and 5 billion pounds of cheese whey is fed to animals or wasted. The minerals and other nutrients it contains are valuable for human food.

Cream is separated from milk on many American farms, and the skim milk remaining is fed to animals. This is better than losing it entirely, but experts surmise that only 10 percent of the nutrients fed to animals as skim milk is returned to human beings as food.

In 1936 a preliminary survey showed that less than half of all the nutrients in milk except milk fat were used directly as human food.

Between the cow and the consumer half the milk proteins produced by America's 25 million cows was wasted or first fed to pigs and poultry, half the lactose, and half the minerals. The only milk nutrient which reached consumers in anywhere near the quantity it was produced was milk fat, consumers ate 95 percent of the annual production of this product.

Diet experts comment sharply on this situation by noting that if a way were devised to use the milk nutrients that are now wasted you would in effect double the diet value of milk (except for what the milk fat contributes) without having to produce a single extra quart of it.

Dairymen and economists, and dairy chemists acknowledge this fact and add a comment of their own. If, they say, a way could be worked out to use the milk products which are now wasted dairy farmers' incomes could be increased.

That's the problem on which scientists of the Bureau of Dairy Industry have been working: How to turn billions of pounds of milk nutrients that are now wasted, into valuable food for consumers and into saleable, instead of wasted, products for farmers.

It isn't solved yet, but when the longshoremen and stevedores loaded whey candy, skim milk potato chips, and whey soup into the holds of the good ships *North Star* and *Bear* they were signalizing the progress that had been made.

Processes have now been almost perfected by which whey and skim milk may be used in foods commercially.

Besides the foods that went along with the Antarctic expedition there are other whey foods that are almost ready to go into commercial production.

Whey, for example, has been added to fruit juices, producing a drink which combines an important part of the nutritious elements of milk with those of the fruit.

Desserts may look different, too, in the future, when canned fruit whey whip comes on the market. This product is made with fruit sugar, gelatin, and sweet whey. After a couple of minutes' whipping this product froths into a fruit whip which sets in about one-half to one hour from the time it is placed in the ice box.

Whey added to jams and preserves, it was discovered, made it possible to whip these delectable foods so they could be served as sauces on ice cream, waffles, and other foods that take sweet sauces.

Whipped tomato salad is something else the Bureau of Dairy Industry chemists visualize. This is made by whipping tomatoes and vinegar with gelatin and whey. The resulting tomato red foam can be poured into a mould and later served on lettuce.

The whey candies are made with candy recipes which call for 25 percent whey solids. The whey here replaces sugar and corn syrup. Fudge and caramel made from this recipe gives greater variety of nutrients than ordinary candy and is less sweet.

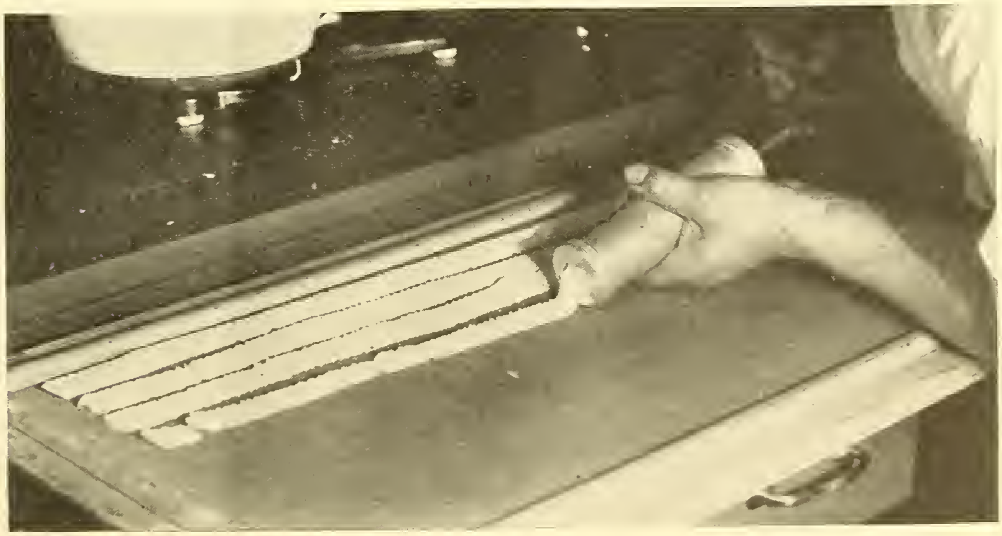
The whey soup the Antarctic explorers will spoon into themselves when the gales blow outside is made of 65 percent split pea solids, 25 percent whey solids, and 10 percent fat. This soup keeps well, is cheap and nutritious. Other soups, too, can be made with whey, and one, tomato soup, has additional advantages. Made with whey it can be heated and held hot without lumping. At the same time the tomato flavor is retained more completely when whey is used.

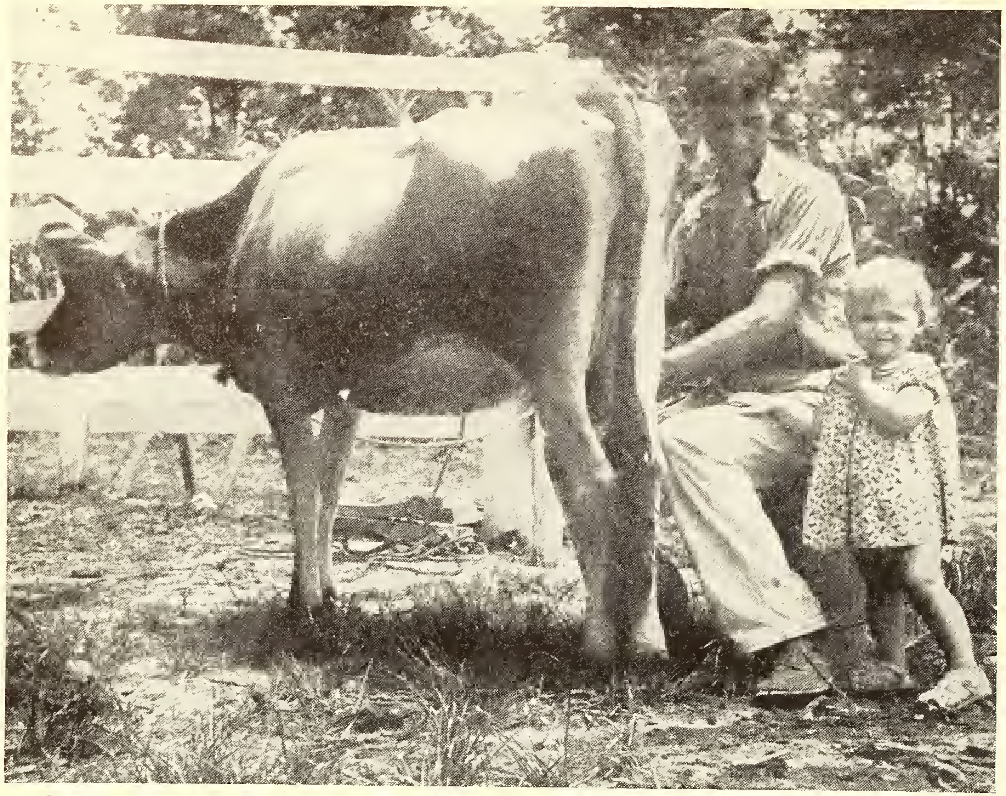
Skim milk potato wafers will float on top of the whey soup at the South Pole this winter. They won a place in the expedition because they contain no fat and therefore will not get rancid. They are made by drying or toasting a mixture of boiled potatoes, skim milk, and salt. The same formula can be used to make potato wafers and potato sticks.

When and if this potato and skim milk product comes into use it will utilize another waste product besides skim milk, cull potatoes, that is, potatoes that fall into grades too poor to be marketed. The head of the Bureau of Dairy Industry, reporting on this product to a convention of milk producers' cooperatives, said, "We think of this new product as having possibilities in regions remote from markets, where skim milk and cull potatoes are cheap. In this way it would help dispose of 2 waste products."

The rindless, non-shrinking, non-drying cheese is not preshrunk or predried. It gets its extraordinary quality from the type of container it is packed in. These containers have holes in them of a design which lets out gasses formed by cheese when it ages, but which also keeps the outside air out so the cheese doesn't stale. The result is a cheese which ages but which age does not stale.

THE TOOTHPASTE-LOOKING RIBBON is a potato wafer in the making. Developed in the laboratories of the Bureau of Dairy Industry, this product is one of many which utilize nutrients that don't reach humans. The potato wafer here is made of skim milk powder and low grade potatoes. Other valuable new foods that make use of milk nutrients are whey candies, soups, and chips.





BOSSY, multiplied 25 million times, produces more than 100 billion pounds of milk each year in the United States. Most of the fat in this milk gets to human beings, but almost half of the protein, the minerals, and the sugar it contains is fed to animals or wasted. Department of Agriculture scientists are now working on new foods which utilize those by-products of the dairy industry. Consumers could recover some of this valuable supply of nutrients by using more skim milk.

More details about these victories on the scientific milk front may be obtained from the Bureau of Dairy Industry, Department of Agriculture, Washington, D. C.

How soon these products get on the market depends of course upon the willingness of manufacturers to go to work and produce them. No doubt manufacturers will come along who will produce these new foods and prove that there is at least one frontier where pioneers are still welcome—the one that opens up at the end of a test tube.

Coming out of the test tubes in this case are discoveries which point the way to utilizing every unit of nourishment in every quart of milk. And that's something to look forward to in these days when too many families can buy too few quarts of bottled milk.

IN THE YEAR 1936 the United States produced enough milk, 106 billion pounds of it, to fill a great sea basin a half mile wide, about 4 miles long, and 30 feet deep. All 221 destroyers in the United States Navy could be nested in this basin, but there was a better use to be made of the milk. It was used as food, but not altogether.

The 106 billion pounds of milk contained 4 billion 100 million pounds of butterfat and practically all the butterfat (96.5 percent) sooner or later was consumed by human beings.

It also contained 3 billion 600 million pounds of milk protein, but only half of this milk nutrient was served to consumers in milk or other dairy products.

It contained 5 billion 200 million pounds of milk sugar of which slightly less than half reached consumers in dairy products.

It contained a mineral cargo of 700 million pounds of calcium, phosphorus, and other minerals of which only half was delivered to consumers in their dairy products.

Thus, except for the milk fat, about half the nutritional substance of milk was sidetracked before it reached consumers.

Where did it go?

Tremendous quantities of these milk nutrients not reaching consumers in milk products go to animals. In the process of making cheese, cream, butter and other dairy products, skim milk, whey and buttermilk are left behind. In these products are most of the precious nutrients of whole milk except the butterfat. Instead of getting to human consumers, most of these nutrient-rich products are shunted back to the farm for use by animals as feed.

Animals in 1936 got, for instance, 4 out of every 10 pounds of milk protein; 4 out of every 10 pounds of milk sugar; 4 out of every 10 pounds of the minerals in milk.

Milk nutrients fed to animals which later are slaughtered for human consumption are, in greater part, lost to humans. The calcium, utilized in building animal bones, is lost altogether as far as humans are concerned. Out of every 10 pounds of milk proteins fed to animals only one pound eventually reaches humans as food.

Against this loss to humans there is some compensating gain to animals. Milk nutrients are a valuable addition to the diets of some animals in certain instances. Since it is a relatively expensive feed, it is usually given to young animals and as a supplement to other feed, especially for swine and poultry. In these cases, milk builds good animal health, just as it builds good human health. Farmers are often able to get higher prices for milk-fed animals to compensate for the added cost of feeding them.

But much milk goes to animals over and above these economical uses. The reason is that we know better how to dispose of this excess milk to animals than to the humans who need it. This is social waste, a serious matter when millions of human beings are going without adequate supplies of the minerals that come so abundantly and in such usable form in milk.

Some of the milk nutrients that are lost to human consumers are lost to animals, too. Nobody gets them because they are wasted completely. In proportion to the total amount of milk produced, this loss looks small. In actual amounts, it looms large. Less than 3 percent of all the milk protein produced in 1936 failed to reach animals or humans, but this little percentage represented 108 million pounds. Similarly nearly 312 million pounds of milk sugar were totally lost. About 35 million pounds of mineral nutrients, the most valuable of which are calcium and phosphorus, never reached either a two-legged or four-legged consumer. As by-products, in most cases, of the manufacture of cheese and other dairy products, these nutrients often are dumped out to pollute streams or seep into the ground.

Rickets and hollow chests and crooked legs mutely challenge our ways of using and misusing the great storehouse of bone-building materials in the milk which farmers make available. How to put every ounce of them to good use is a problem on which many minds are needed: the scientist's as well as the economist's; the milk industry's as well as the Government's; the consumer's as well as the producer's.

For Your Medicine Cabinet

Until labels on drugs carry warnings—where they are needed—on use and misuse, these cautions from the Food and Drug Administration are valuable checks on the over-doser

DRUG WARNINGS

WHEN CONGRESS gave the Secretary of Agriculture a new Food, Drug, and Cosmetic law to administer, it laid a new job on the doorsteps of the makers of medicines.

It's no secret, Congress said in effect, that many consumers, unable or unwilling to consult physicians, attempt to prescribe for themselves the remedies they need when aches and pains lay them low. Often, through announcements about your wares, you manufacturers encourage consumers to do this.

Nor is it a secret to experts in remedies and ailments, Congress figuratively continued, how ignorant many consumers are of the cause of their pains and of the suitable remedy for that cause. Those who are least able to prescribe for themselves are many times the ones most likely to do so. You don't have to look far to find people who took the wrong medicine at the right time, or the right medicine at the wrong time.

Now, since people's health and their very lives are a concern of the Nation's, we are laying down new rules for the sale of drugs. Henceforth, said Congress, we outlaw drugs sold across State lines whose claims are "false or misleading in any particular," whose labels fail to show the net contents and fail to exhibit with sufficient prominence information required by law.

Drug labeling, by law, must now carry "adequate directions for use" and "adequate warnings" against misuse by children or under unsafe conditions.

On January 1, 1940, this provision of the law went into effect. So many requests for advice on what constitutes adequate warnings have come to the Food and Drug Administration that it has issued a statement giving what seem, for the present, at least satisfactory cautions. No manufacturer is required to adopt this language. He may re-word such warnings, modify them or substitute his own. They are offered as suggestions only. But if the manufacturer's warnings are insufficient, his products stand the chance of being seized by the U. S. marshal for failure to observe the law.

In the following list, special note is made of drugs which are believed to be too dangerous to be offered for sale "indiscriminately." These drugs, the FDA holds, should not be sold "over the counter" but only on doctor's prescription.

Because these suggestions by the Food and Drug Administration provide useful cautions to consumers, we give the list as it was issued. Consumers should know that the new law also provides that a drug which is not labeled with its common name must show on the label the common name of all of its ingredients. So, while some of the names which follow have heretofore not ordinarily appeared on labels, they will be seen increasingly as manufacturers make their practices conform to the new law.

1. Cathartic or laxative drugs (except castor oil and phenolphthalein) which act as irritants to the gastro-intestinal tract or stimulate intestinal peristalsis:

"Warning: Not to be used when abdominal pain (stomachache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present.

"Frequent or continued use of this preparation may result in dependence on laxatives."

2. Castor oil:

'Warning: Not to be used when abdominal pain (stomachache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present.

"Frequent or continued use of this preparation may result in dependence on laxatives."

"Do not use during pregnancy except on competent advice."

3. Phenolphthalein:

"Warning: Not to be used when abdominal pain (stomachache, cramps, colic), nausea, vomiting (stomach sickness) or other symptoms of appendicitis are present.

"Frequent or continued use of this preparation may result in dependence on laxatives.

"Important: If a skin rash appears, discontinue use."

4. Preparations containing so-called roughage materials and intended for use in constipation.

"Important: All varieties of constipation are not benefited by this preparation. It should be particularly avoided in cases such as spastic constipation in which abdominal discomfort or pain may be present."

5. Preparations containing mineral oil for oral administration:

"Warning: Do not take directly before or after meals."

6. Preparations containing sodium perborate as an active ingredient and intended for local use in the mouth and throat:

"Warning: This preparation may cause irritation and inflammation of the gums, tongue and mucous membranes of the mouth. It should be discontinued at the first sign of irritation or soreness. In case of doubt, consult your physician or dentist."

7. Nose drops, inhalants and sprays:

A. Those that contain oil as a vehicle or base:

"Caution: The use of excessive amounts of this preparation may be dangerous. Do not use at all in infants and younger children except on competent advice."

B. Those that contain ephedrine, epinephrine, amphetamine (benzedrine), propadrine, neosynephrin and other vaso-constricting drugs of similar activity:

"Caution: Frequent or continued use may cause nervousness, restlessness or sleeplessness. Individuals suffering from high blood pressure, heart disease, diabetes, or thyroid trouble should not use this preparation except on competent advice."

8. Preparations containing volatile oils, aromatics, or drugs of an oleo-resinous nature and intended for their effect upon the urinary tract:

"Warning: If disturbance of the stomach or bowels or skin rash is noticed, discontinue use."

9. Atropine and pharmacologically related drugs:

"Caution: Frequent or continued use of this preparation should be avoided. Discontinue if dryness of the throat, excessively rapid pulse or blurring of vision appears.

"Warning: This preparation should not be taken by elderly people except on competent advice."

10. Iodine or iodides:

"Warning: Do not use in cases of lung disease or chronic cough, goiter or thyroid disease, except upon the advice of a physician.

"If a skin rash appears, discontinue use."

11. Preparations containing carbolic acid as a therapeutically active ingredient:

Note: Products containing more than 2 percent of carbolic acid are not considered safe for indiscriminate distribution.

"Warning: When applied to fingers and toes, do not use a bandage.

"Apply according to directions for use, and in no case to large areas of the body."

12. Cresols, creosote, guaiacol or coal-tar derivatives intended for use as douches:

Note: Preparations intended for use after dilution should bear adequate directions for preparing solution and thorough mixing before pouring into douche bag.

"Warning: The use of solutions stronger than those recommended may result in severe local irritation of burns or serious poisoning."

13. Cresols, creosote, guaiacol, or coal-tar derivatives intended for surface application:

"Warning: Apply according to directions for use and in no case to large areas of the body."

14. Strychnine:

"Warning: Do not take more than the dosage recommended. Frequent or continued use is to be avoided and its use for children and elderly persons may be especially dangerous."

15. Anthelmintics:

The following preparations in therapeutically potent doses are not safe for indiscriminate distribution and should only be used under the direct supervision of a physician.

a. Carbon tetrachloride:

Note: Specific adequate directions for administration of a saline cathartic after use of this drug should be given.

"Warning: Avoid taking castor oil or other preparations or foods containing oil or fat while this drug is being administered. The use of this preparation in debilitated children and persons addicted to alcohol is dangerous."

b. Tetrachlorethylene:

Note: Specific adequate directions for the administration of a saline cathartic should be given.

c. Aspidium (Male Fern):

Note: Specific adequate directions for administration of a saline cathartic should be given.

"Warning: Avoid taking castor oil or other preparations or foods containing oil or fat while this drug is being administered."

d. Santonin:

"Very Important: Shake vigorously before using. Failure to do so may result in serious injury.

"Caution: The use of more than the prescribed dose is dangerous.

"Do not take castor oil or other preparations or foods containing oil or fat while this drug is being administered.

"The prescribed dose should not be repeated within 7 days."

e. Chenopodium oil:

Note: Specific adequate directions for administration of a cathartic, preferably castor oil, should be given.

f. Thymol:

Note: Specific adequate directions for administration of a saline cathartic should be given.

"Warning: Avoid taking alcohol or any preparation containing alcohol before, after or during administration of this drug."

16. Acetanilid:

"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances, anemia, collapse, or a dependence on the drug. Do not take more than the dose recommended. Not to be given to children."

17. Acetophenetidin:

"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances.

"Do not take more than the dosage recommended."

18. Antipyrine:

"Warning: Frequent or continued use may be dangerous, causing serious blood disturbances.

"Do not take more than the dosage recommended."

19. Bromides:

"Warning: Frequent or continued use may lead to mental derangement, skin eruptions or other serious effects.

"Do not take more than the dosage recommended.

"Not to be taken by those suffering from kidney disease."

20. Mouth washes and gargles containing chlorates:

"Caution: Avoid swallowing."

21. Preparations containing arsenic except those employed as chemotherapeutic agents for specific diseases such as syphilis, amebic dysentery, etc.:

"Caution: Continued or prolonged use may result in serious injury."

22. Quinine, cinchonine and cinchonidine:

"Caution: Discontinue use if deafness, skin rash, visual disturbances (eye trouble) or other serious symptoms appear."

23. Preparations containing silver salts:

"Caution: Prolonged or frequent use of this preparation may result in permanent discoloration of the skin and mucous membranes."

24. Preparations sold under representations relating to coughs due to colds:

"Important: Persistent coughs may indicate the presence of a serious condition. Do not use this preparation when the cough has persisted for 10 days without securing competent advice."

25. Preparations containing mercury intended for use by mouth or by douches:

"Warning: The prolonged or frequent use of this preparation or the use of amounts in excess of the prescribed directions may cause serious mercury poisoning."

26. Rubifacients, or irritants such as ammonia, arnica, catharides, capsicum, chloroform, ether, methyl salicylate, pepper, mustard or turpentine oil intended for surface application.

"Caution: This preparation may irritate the skin, particularly if applied with rubbing. Avoid getting it into the eyes or on mucous membranes."

27. Chrysarobin or Goa Powder:

"Caution: The use of this product over large skin areas may cause kidney irritation.

"Warning: Keep away from the eyes."

28. Digitalis, squill, strophanthus, or other pharmacologically related drugs in therapeutically effective proportions:

Note: Potent doses of these drugs have an accumulative action and may lead to disastrous effects upon the heart and circulation. They should be used only under the direct supervision of a qualified physician.

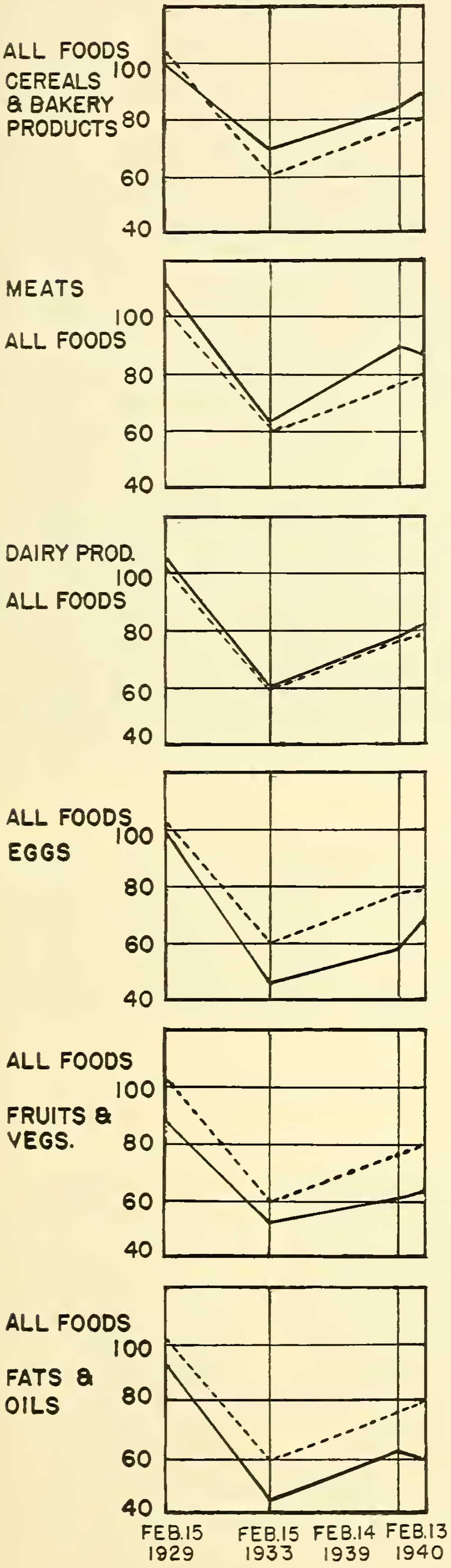
"Caution should be exercised in using this preparation, particularly if the patient has had digitalis, squill, strophanthus, oubain or similar drug within the preceding three weeks.

"The appearance of anorexia (loss of appetite), nausea, vomiting, headaches or heart irregularities (palpitation) is often an early sign of full digitalization or overdosage. When such symptoms appear do not continue the use of this preparation without consulting the physician."

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE

(1923-25 = 100)



FOOD COSTS. Retail food costs stepped up 1.3 percent from January to February, primarily due to freezing weather which severely damaged orange, grapefruit, and vegetable crops in the Southern States and checked milk and egg production temporarily. Retail prices of these items went up instead of registering their usual seasonal decline. These increases, together with higher flour and bread prices, more than offset price reductions in meats, fats and oils, and sugar. While food costs in mid-February were nearly 2 percent higher than they were a year ago, they were lower than costs in any other February since 1934.

FOOD SUPPLIES. Food supply outlook has not changed appreciably in recent months except for the shift in citrus fruit and vegetable prospects due to the freeze. It now appears that supplies of winter oranges, which are marketed in quantity through mid-May, will be substantially smaller than last year. Summer oranges, which move to market mainly after early May, were not affected by the freeze and still are expected to be slightly less plentiful than in 1939. Grapefruit supplies during the remainder of the current season probably will be a third smaller than last year. Vegetable supplies this April not only are expected to be smaller than last year but many of the crops probably will move to market about two weeks later than usual.

MEATS. Pork and better grade beef are expected to be much more plentiful but lamb supplies may not differ much from last April.

TURKEYS. Relatively large supplies are in prospect this April, in view of record size cold storage holdings, the principal source of supply at this time of the year.

FRUITS. While smaller citrus supplies than in 1939 are in prospect, more pears and apples than last April probably will be available as the result of the loss of export markets.

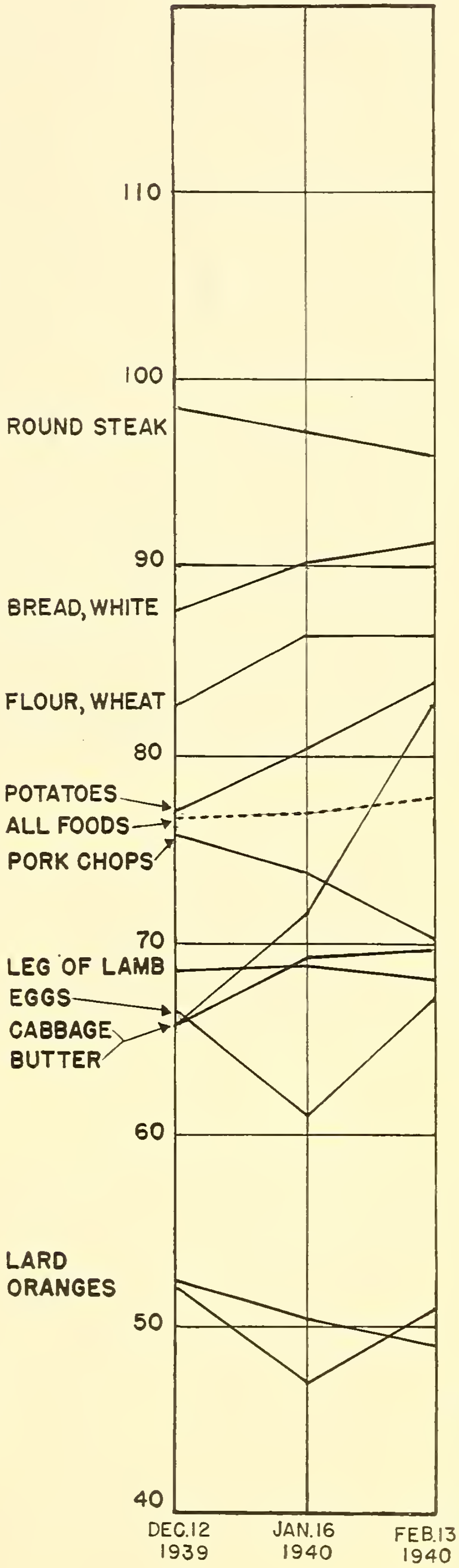
STRAWBERRIES. Supplies are expected to increase seasonally during April, but probably won't be as plentiful as last year due to unfavorable growing conditions.

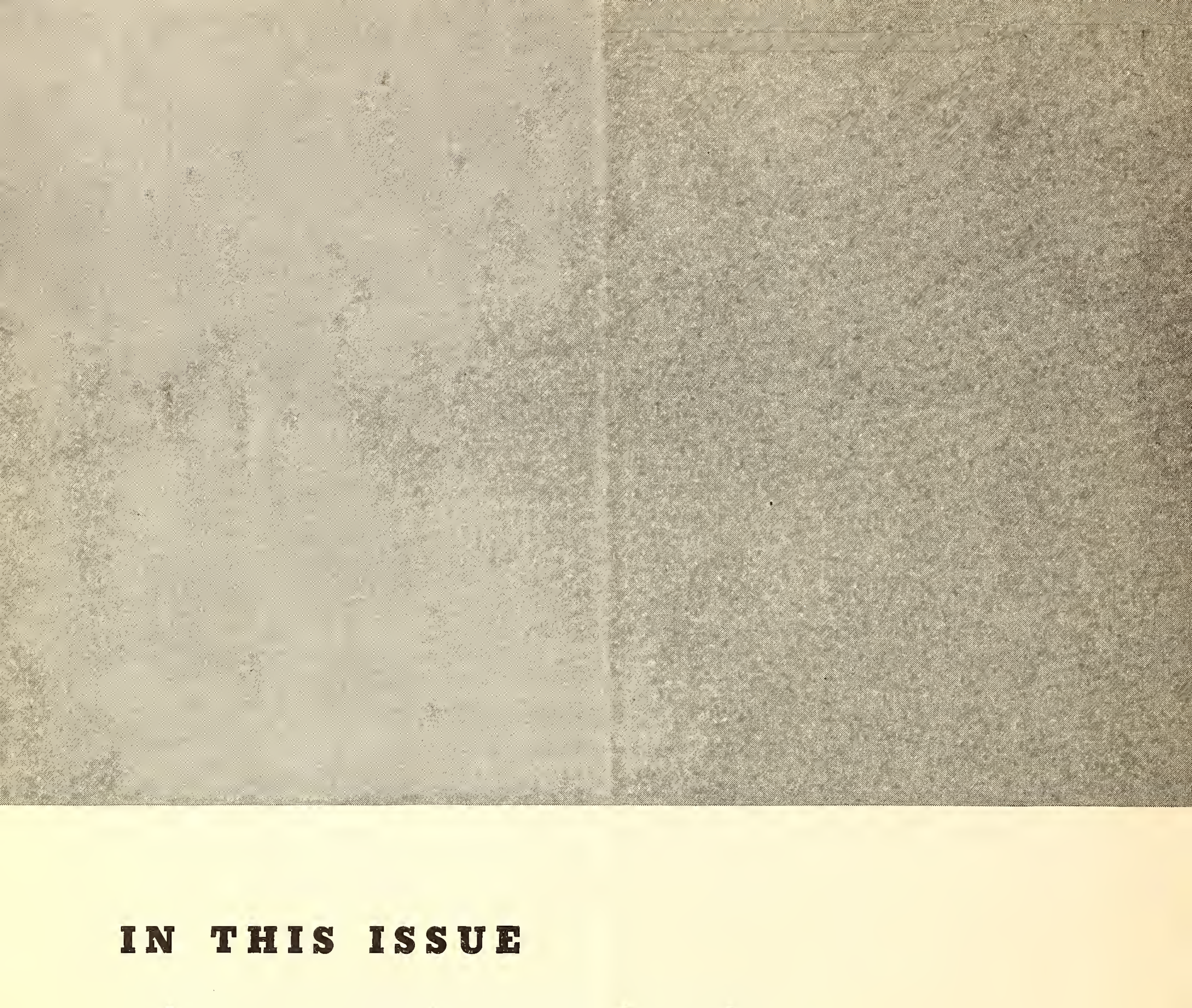
POTATOES. Shipment of new potatoes probably will be relatively small until mid-April, and smaller supplies than last April are in prospect. Old potato supplies most likely won't differ much from last year.

EGGS. Supplies are expected to increase seasonally in April and to be a little larger than they were last year.

A CLOSE-UP

(1923 - 25 = 100)





IN THIS ISSUE

APRIL 1, 1940 ● VOLUME VI, NUMBER 13

Stamp Planning for Cotton 3
Let's Wipe It Out! 7
Whey Goes to the South Pole 10
For Your Medicine Cabinet 13
Your Food Supplies and Costs . . . 15

U. S. GOVERNMENT PRINTING OFFICE 217830

1.94
AD422c

U. S. F. S. RECEIVED
LIBRARY
MAY 24 1940

SOIL CONSERVATION

CONSUMERS' GUIDE

APRIL 15, 1940

QUALITY FACTS

TERMITES

WASHING MACHINES

FOOD SUPPLIES

CONSUMERS' GUIDE

APRIL 15, 1940 VOLUME VI, NUMBER 14

A Publication of the
Department of Agriculture
Washington, D. C.

Issued monthly from June through
September; Semi-monthly from
October through May

Prepared by
Consumers' Counsel Division

D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

PRICE AND QUALITY, most people assume, are passengers on the same elevator. When price goes up, the assumption runs, quality goes up, too. If quality goes down, then price is supposed to go down with it.

Out in Ohio, some investigators recently looked into the relationship between the price and quality of the canned tomatoes and corn packed and sold within the State. This study, undertaken at the suggestion of the Ohio Canners Association and partly financed by it, was carried through by the Ohio State University and the State Agricultural Experiment Station.

About 200 grocery stores, chain and independent, in 3 cities, Cincinnati, Cleveland, and Columbus, were visited. Investigators bought 43 different brands of corn packed by 23 Ohio canners, 65 cans in all. Their tomato purchases, 65 cans, came in 35 different brands and were packed by 25 canners. For both corn and tomatoes they bought cans of only one size, No. 2.

ALL CANS WERE TURNED OVER TO OFFICIAL graders of the U. S. Department of Agriculture. The price for the No. 2 cans of tomatoes the investigators bought ranged from a low of 5.5 cents a can to a high of 14 cents, with the average for all 65 cans coming to 8.25 cents. One of the cans of tomatoes turned out not to be tomatoes at all, but tomato juice. However, for the 64 remaining cans the average quality score was 76.2. (U. S. Grade A refers to corn and tomatoes scoring from 90 to 100; Grade B to scores from 75 to 89; and Grade C to scores above 60.) One can of tomatoes which sold at the lowest price scored 76, or 37th in the 64 cans. The tomatoes in this 5.5 cent can were of higher quality than those in other cans which sold for 12 cents, 10 cents, and 8 cents.

Highest priced can of tomatoes, which sold for 14 cents, had a quality score of 91 which put it 6th on the list. It ranked below 3 cans of tomatoes which sold for 6.25 cents, and 2 others which sold for 10 cents.

Cans of corn were for sale at prices which ranged from 5.5 cents to 15 cents a can, with the average striking 8.43 cents. The average quality score for the 65 cans of corn was 75.4.

The best scoring can of corn, 95, sold for 7.5 cents a can, with the highest priced can (15 cents) scoring second with 94. On the other hand the lowest priced can of corn (5.5 cents) ranked 25th in quality among the 65 cans of corn with 77. Below it in quality there were cans of corn which sold for 7.5 cents, 8.33 cents, 10 cents, and 12.5 cents.

Seven cans of tomatoes all of which were sold under the same brand name were examined by Federal graders. Although these tomatoes were packed under the same brand, quality ranged from 60 to 85 with an average quality of 74.9.

NEXT THE INVESTIGATORS TURNED THEIR attention to the adjectives on the labels to see how closely they described what was in the can.

"Of 64 tomato samples," the report reads, "19 cans bore on the labels such claims as 'Fancy,' 'Selected Hand Packed,' 'Best Buy,' 'Quality Supreme,' 'High Quality—Pure Food', 'Distinctively Different,' and 'Extra Hand Packed—Rich in Vitamins.' The quality of these 19 samples averaged 76.8. The quality scores of the 45 samples bearing no such claims averaged 75.9, or so nearly the same as to represent no significant difference."

The contents of the cans of corn looked into showed similarly that adjectives had nothing to do with tested quality.

One can of tomatoes (not typical) indeed satirized the entire problem. The label on this can read: "This can is packed entirely by hand with tomatoes solid from bottom to top. Prepared from fully ripe fine flavored Ohio-grown tomatoes. Eat them raw or cooked. You will find this can of good tomatoes is worth twice as much as a poor one." When opened the can revealed tomato juice—not tomatoes, and no tomato solids.

Consumers, contemplating such findings, might gather that the compass points they ordinarily rely on when they go shopping steer them nowhere.

"When the goods (a consumer buys) are enclosed in cans that are sealed, rigid and opaque, her uncertainty about the utility of the contents is even further increased. As a consequence she has come to rely upon the price as a buying guide," comments the report on the investigation.

"But we have seen that price alone merits no confidence . . . We have observed also that brand names frequently cannot be depended upon . . . Moreover, personal familiarity with the actual quality of competing goods is out of the question for the average consumer . . .

"Therefore, the conclusion is inevitable that some other more dependable means must be adopted to indicate quality to a buyer if she is to buy intelligently and avoid wasteful and uneconomic expenditures . . .

"A reliable statement of quality and other pertinent factors on every label would satisfy these requirements.

"FULLY INFORMATIVE LABELING," THE conclusions go on to say, "holds promise of real benefits to sellers as well as to buyers . . . Transactions would be more equitable. Business relationships would be improved. Efficiency would be encouraged through the payment of premiums in the form of higher prices for higher quality and imposition of penalties in the form of lower prices for lower quality. Discouragement and losses and litigation caused by unfair competition would be reduced. All transactions in a given lot of merchandise would be conducted in the same language, and all parties concerned could be equally well informed about the value of the goods."

One form of labeling which meets the specifications outlined by the Ohio State University report is the A–B–C grade labeling system which the Department of Agriculture offers to canners and packers.

A description of the A–B–C grading system was printed in the March 1, 1940 issue of the *Consumers' Guide.*

Incidentally, the Ohio report was issued by the Department of Rural Economics, Ohio State University, Columbus, Ohio, as Mimeographed Bulletin No. 123.

Our thanks to the Farm Security Administration for the photographs on pages 4 and 5.

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic, 80 cents a year, foreign. Postage stamps will not be accepted in payment.

MARCH 21, 1935. New Yorkers woke up to see 300 million tons of opaque dust in the air, 6 million carloads of Kansas, South Dakota, Oklahoma, and Texas farms. Congress, in 1935, passed the Soil Conservation Act, launching a national attack on the soil erosion behind such damaging dust storms.

Look to the Soil

When dust rides the winds, and mud chokes the streams, and the fertility of the earth becomes exhausted, there's danger ahead for everyone. Now there is a program to battle with soil losses. This is the first of four articles that tell how the program works

NINEVEH, whence came the quinquiremes, was built on a shelf between 7 and 9 inches thick.

Now a shelf that thick may for a time support a city if it doesn't wear thin, if it is shored up and braced, and if the timbers supporting it don't rot or fall away.

But if you pay too much attention to commerce in ivory, apes, and ebony, and too little to the tremors that pass through the land, after a while the shelf gives way, the city on it slides off into dust and there are lizard covered red rocks, yellow sands, and hot desert winds where the city flourished.

The shelf beneath Nineveh did give way, and today archaeologists and their battalions of laborers must dig through 30 feet of sand if they want to see the bazaars where once there was traffic in porphyry and peacocks.

This America of ours, too, was built on a shelf 7 to 9 inches thick. The cities, the skyscrapers, the railroads, the battleships, the Washington Monument, the subway, and the elevated, the Golden Gate Bridge, Boulder Dam, the Lincoln Memorial, the cathedrals of learning, and the cinema palaces, the whole United States—from Canada to the Rio Grande, from Maine to California—all of it, was built on a shelf which was on the average, no thicker than 9 inches.

Commonly this floor, the thickness of a layer cake, which supports upwards of 130 million people is called topsoil. Already, however, precious inches of it have been lost. On the average, only 5 to 6 inches of it are left. Over thousands of acres, all of it has been peeled off by rain and wind. Without the remaining 7 inches of topsoil which lie over the land the less fertile earth beneath these inches would be hard put indeed to produce the things so urgently needed by the 130 million people who go about their business today. Probably it could not be done.

Without the topsoil there could be little agriculture, few livestock, few forests, few birds (except those in flight across a searing desert), few streams and rivers (except for occasional floods which would disappear as suddenly as they appeared after a storm), and little, if any, game.

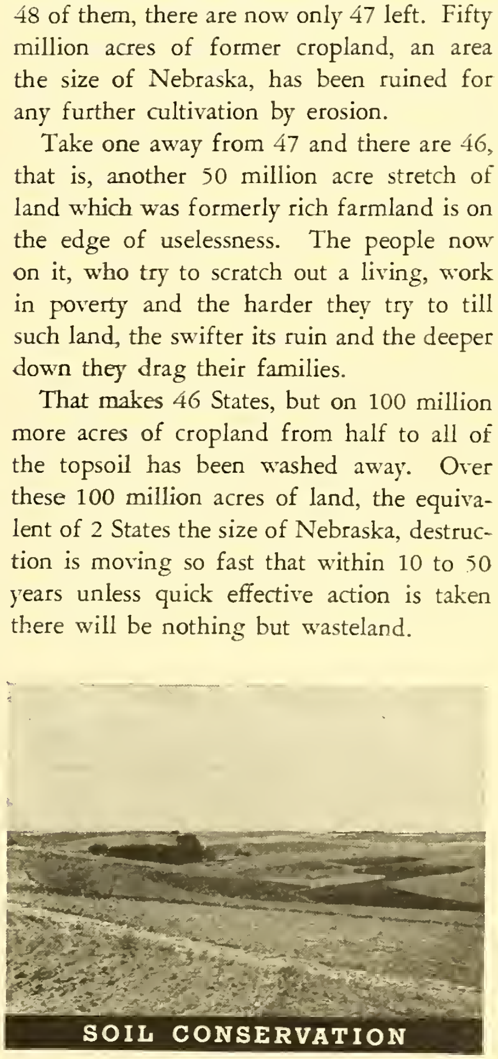
Now there are facts which are interesting, but inconsequential, that lead to nothing (there are about 206 bones in the human body). Then there are facts which are interesting and consequential, which should lead to action.

People are inclined to regard warnings about soil exhaustion and erosion the way they do warnings to the effect that in 100,000 years there won't be any coal left.

Soil erosion is a here-and-now problem. Already you might say the United States has lost a State, where once there were 48 of them, there are now only 47 left. Fifty million acres of former cropland, an area the size of Nebraska, has been ruined for any further cultivation by erosion.

Take one away from 47 and there are 46, that is, another 50 million acre stretch of land which was formerly rich farmland is on the edge of uselessness. The people now on it, who try to scratch out a living, work in poverty and the harder they try to till such land, the swifter its ruin and the deeper down they drag their families.

That makes 46 States, but on 100 million more acres of cropland from half to all of the topsoil has been washed away. Over these 100 million acres of land, the equivalent of 2 States the size of Nebraska, destruction is moving so fast that within 10 to 50 years unless quick effective action is taken there will be nothing but wasteland.



Erosion has just begun to tear at the soil on another 100 million acres of cropland. That makes 6 States, either lost, or in hazard. This means for the country as a whole, and considering all types of land erosion has ruined or seriously impoverished, about 282 million acres. From an additional 775 million acres, it has stripped away from one-fourth to three-fourths of the fertile topsoil.

Invasion, as deadly in its ultimate effect as war, then, has attacked or is threatening half of the 2 billion acres which constitute the United States.

The social effects of worn-out, cut-away, flayed land are those of a slow-motion disaster. The impact of a fire, a flood, an earthquake, jolts the world and awakens the sympathies of millions of people to the needs of the stricken.

When the farms in a rural county slowly lose their fertility, however, and the farm families one by one lose their farms and drift away, the decay of the farm community unfolds over 10, 20, 30, and 40 years. Not until the land is lost, and the glacial economic and social consequences have completed their damage is the damage itself public knowledge.

PATRICK HENRY in a speech after the Revolution said: He is the greatest patriot, who stops the most gullies. Erosion does not stop on the land. Poor soil makes poor communities and poor people.

On may 11, 1934, new yorkers awakened, as Chicagoans had the day before, in a weird yellow atmosphere. A thin film of dust filtered onto window sills, over table tops, onto floors. The air was dry, and faintly irritating. One man said that breathing the air was like working "at the tail end of a straw stacker in the loft of a barn."

That was the first dust storm which blew East. New Yorkers had to read their papers to find out what had happened, though Southerners and Westerners in the city knew immediately what it was in a general way.

They did not know that it was 300 million tons of topsoil gathered up from farm surfaces extending from South Dakota to Texas.

This dust storm put soil erosion in the headlines, made it a matter of general public knowledge, and gave a dose of much needed publicity to the problem of what to do about the vanishing United States.

Floods won 120 point type in the headlines when they deposited 3 inches of mud on the counters and shelves of the department stores in Pittsburgh's golden triangle. Smaller follow-up stories told of the million acres of farmland covered by scum the floods left.

In the typographical trail of floods and dust storms, stories of stranded families on cut-over land began to appear in the papers. Stories of migrant families.

The Nebraska farmer who sat on his front porch to count the Kansas farms as they blew by got a small box on the front pages of most papers.

Jalopies piled high with furniture and the wondering pathetic faces of children began to appear in the sticky brown rotogravure sections of Sunday papers.

The plough that broke the plains had at last left an impression on the public mind. People began to want explanations and soil experts, foresters, meteorologists, ecologists, and botanists came forward to make them.

Floods and dust storms and migrant families which suddenly burst into the public consciousness were the end links in a chain which was forged by land use policies of 300 years, tearing away at soil which it had taken thousands of years to build.

America was promises of wealth to the settlers and those who succeeded them. It was a treasure land to be looted, looted honestly, looted with courage, looted with hard work, but looted nevertheless. Axes rang in forests. Ploughs gouged the virgin soil. Grass was sheared off the land. Wild animals were massacred. Birds were slaughtered. Hills were denuded of trees. The matted tangled plains were furrowed.

Patriotically intent on peopling the plains or inhabiting the wilderness, urged on by a national policy intended to exploit the natural wealth as quickly as possible, pioneers, settlers, and then, just farmers, overthrew the slow processes of nature and installed a plan of their own.

In 10, 20, 50 years, topsoil which was 7 thousand years in the making was first laid bare and then washed away by rain, and blown away by wind. Once the soil in one region was exhausted, families moved on, for there was always more land, a continentful of inexhaustible land.

Now, each year 3 billion tons of soil are washed or blown from the fields and pastures in America. Lost with the soil are 43 million tons of phosphorous, potassium, and nitrogen, the principal ingredients of commercial fertilizer. On the basis of the amount paid by farmers for commercial fertilizers in 1934, this represents an annual loss of 10 billion dollars.

Not even science has kept up in the race with erosion. Brilliant discoveries made by scientists have shown farmers how to farm more efficiently and more productively. But so rapidly has soil fertility decreased as the result of erosion and exhaustion that the average per acre yield in the South today is less than it was in the year 1860.

The total loss to the Nation from soil abuse is incalculable. The Chief of the Soil Conservation Service, for example, points out that an adding machine cannot tabulate the dollar and cent cost of the social decay that follows on soil erosion. Much of the loss is in unmeasurable costs.

Incomes go down as soil fertility declines. Irrigated areas dependent on reservoirs must be abandoned eventually as erosion continues.

Helped on by erosion large agricultural sections become ghost regions.

Western farmers dependent upon grazing, see their land waste into desert.

Rural communities disintegrate depositing hundreds of thousands of persons on relief rolls, upsetting traditional and established patterns of community life. Erosion, of course, is only one of many causes of this. But it is an important cause.

Other unmeasurable damages occur too: The depletion of fish in streams, damage to the oyster industry, and the removal of irreplacable plant food constituents from the soil.

THERE ARE ALSO CALCULABLE DAMAGES which can be totaled on an adding machine. The following table tells that story:

Estimated Annual Cost of Erosion

	Million dollars
Direct cost to farmers	400
Damage to highways	180
Damage to railways	100
Damage to reservoirs	30
Damage to streams and harbors	29
Damage to irrigation ditches	18
Damage to drainage ditches	15
Contribution of erosion to increased flood damage	42
Damage to wildlife	5
Damage within cities	25
Total of major items	844

The Peruvian Incas, who had a civilization which was also destructive of the soil, eventually, to feed themselves, were forced to work their land with an intensity which today would mean an expenditure of $18,000 per acre. Such effort was possible only with slave labor. Today if land should be driven to such stubborn resistance by mistreatment this country would have to be abandoned.

America need not be abandoned, however, even though the Secretary of Agriculture recently noted that soil is still being lost faster than it is being restored. There is no problem of erosion anywhere in the country which intelligent, scientifically planned, cooperatively undertaken care cannot solve.

Late, but still in time, such care is under way throughout the country. Farmers are gaining valuable experience. Experts in many Federal agencies, in State agencies, in universities, and research laboratories are working with farmers to save the soil, using the resources and knowledge of sciences which include physics, chemistry, sociology, meteorology, and that youthful science, ecology, the study of the relationships between all the forms and factors of life in a region.

The national program for soil conservation today is so important an activity that a summary of how it came into existence is worth a couple of inches on any page.

TURNING POINT IN THE CHANGEOVER FROM soil dissipation to soil conservation, one expert says, was the publication of the results of a soil survey made in Fairfield County, S. C., in 1911. This survey revealed that 90,000 acres of former farmland in the county had been so cut to pieces by gullies due to bad farming practices that they had been rendered barren. Another 46,000 acres of rich bottomland had been transformed into swampy meadowland because streams choked with erosion sediment had overflowed their channels.

A series of bulletins then followed which culminated with the issuance of a Department of Agriculture Bulletin in 1928 called "Soil Erosion, A National Menace." Alarmed by the facts in this bulletin the House of Representatives in the same year unanimously appropriated $160,000 for the purpose of studying soil erosion.

In 1929 and 1930, 10 soil conservation research or experimental stations were established throughout the country and then in 1933 the Soil Erosion Service was created under authority given in the National Industrial Recovery Act.

SOIL CONSERVATION MET A FACE TO FACE challenge just as the dust was settling over the land from the great dust storms. Then Congress in the Soil Conservation Act of 1935 declared:

"It is hereby recognized that the wastage of soil and moisture resources on farm, grazing, and forest lands, of the Nation, resulting from soil erosion, is a menace to the national welfare and that it is hereby declared to be the policy of Congress to provide permanently for the control and prevention of soil resources and thereby to preserve natural resources. . . ."

By this Act, the Soil Erosion Service was renamed the Soil Conservation Service and

CORN is one of the greatest burdens a land must bear. Row cropping (as opposed to the closely matted growth of grass and clover) exposes the naked earth to erosion by wind and water, while the ravenous corn plant eats away the life-giving nutrients in the soil. Low incomes and tenant status have frequently forced farmers, against their better judgment, to over-crop with corn. Today, new forms of farm leases and soil-conservation payments open up the way to soil-building practices.

established in the Department of Agriculture as a permanent agency. Through erosion control demonstration areas, by the purchase and development of submarginal agricultural land, by cooperating with soil conservation districts, by developing water facilities, by undertaking research in the use of water facilities, and by farm forestry, this agency has worked intensively on the erosion problem. This year its operations were under way on more than 200 million acres of land.

The federal agency which deals with Soil Conservation most extensively today backed into the problem. The Agricultural Adjustment Administration in its inception was an action approach to what had been called the farm problem during the years after the World War. A farm problem was coming due in any event, but it was precipitated by the enormous agricultural surpluses the country continued to produce after the War. Disappearing export markets for farm products created new problems. Finally, unemployment in cities and an industrial crisis sent farm prices plunging down like a monkey wrench dropping in an elevator shaft.

Factories, when orders stop coming in, reduce expenses and close down production. Farmers, when they lost orders, were unable to do anything but go on producing. The first Agricultural Adjustment Administration which was hammered into shape after years of debates in Congress and at farmers' meetings, was intended to give farmers some of the control over production that any manufacturer has.

Once the AAA program began to work, two monumental facts emerged. First, the crops whose surpluses were the substance of farmers' nightmares, were the very crops that wore out the soil. Crop control, by diverting land from soil-destructive crops to soil-building crops, was a first step toward conservation. Second, surveys showed that crop control by itself over a period of time would have to give way to a national agricultural program based upon farseeing land use policies which reckoned with the maintenance of land as well as with its commercial exploitation.

Two other facts emerged to exonerate American farmers of the whole blame for the erosion invasion. Many farmers, it was learned, had a working knowledge of what to do to prevent soil erosion, but they did not have the working capital to put their information to work. Soil conservation required investment of money they didn't have. It required that they cut down on cash crops when their incomes were already too low to live on.

Farm tenancy stood out as another boulder that blocked efforts to take good care of the soil. About 42 percent of American farmers are tenants on their farms. Traditional leases, however, did not encourage tenants to invest time and money in soil-conserving practices, for they did not give the tenants secure tenure. On the other hand landlords hesitated to undertake expensive measures they were not sure tenants would keep up. Soil conservation fell between the two stools.

Surveys were launched to explore the possibility of combining a positive conservation policy equal to the magnitude and difficulties of the problem. Then, just as first conclusions were being drawn from these surveys, the Supreme Court declared the crop control feature of the first Agricultural Adjustment Administration Act unconstitutional. In the emergency, plans that had already been maturing were incorporated in the Soil Conservation and Domestic Allotment Act of 1936.

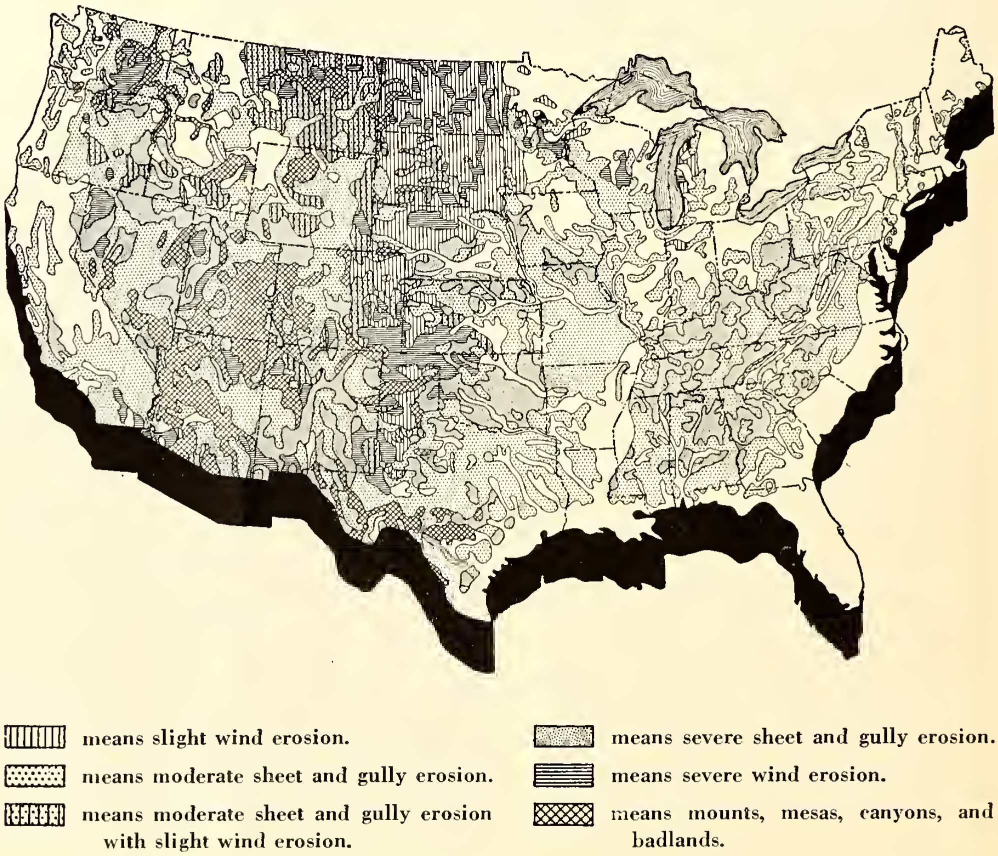
AAA conservation efforts take hold on practically every farm in the country. Administered by committees of farmers in the farm counties, the program has already succeeded in enlisting millions of farmers in the really decisive part of the struggle to save the soil; that is, it has already changed over the workaday farming habits of almost the entire Nation. The retreat, in a sense, has stopped, and the direction is forward from now on.

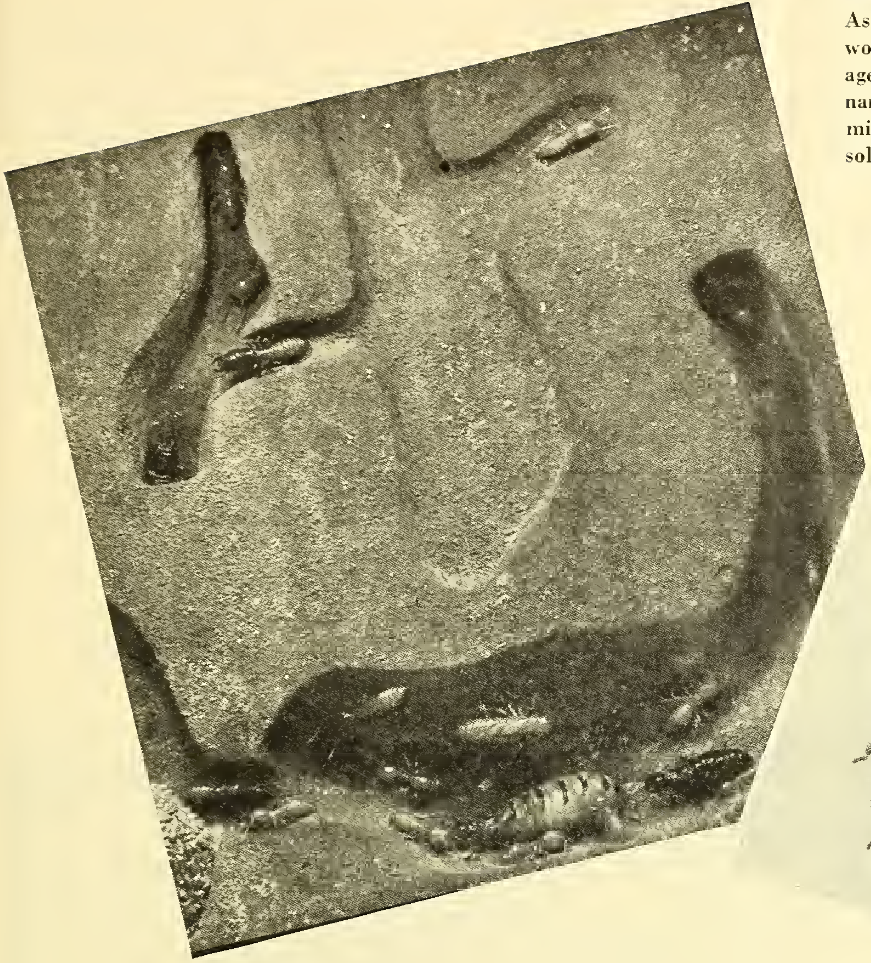
In 1939, the acreage planted to soil-depleting crops was about 23 million less than the average for the preceding 10 years. A considerable part of this land was planted to soil-building crops.

In 1937, farmers down at the grass roots took another step which enabled them to close with the soil-erosion problem even more thoroughly. In that year Arkansas enacted the first Soil Conservation District Law. This law—like others that have now been adopted in 37 States—enables farmers in a region to join together for cooperative action against erosion which would be impossible to undertake individually.

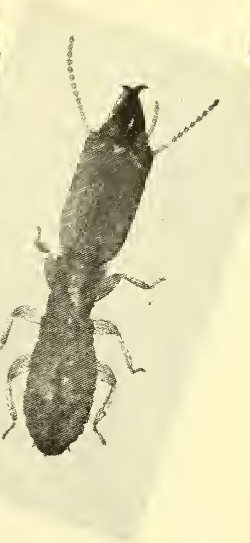
The account of the way the Nation has enlisted men in the fields, the forests, and the laboratories to save the soil is a fascinating one, and the fight they are waging with airplanes, pick and shovel, scientific instruments, mortar, stone, seed, and trees is as exciting as a dispatch from a war correspondent.

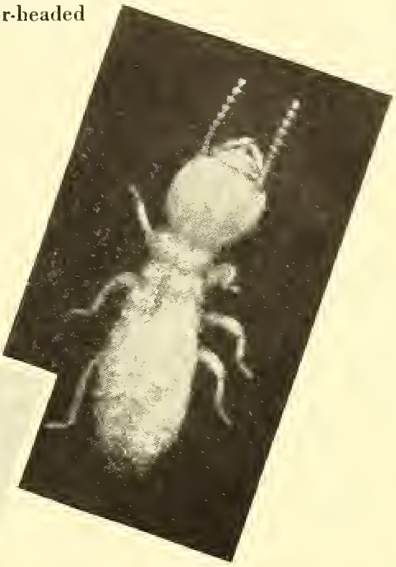
EROSION HAS DONE THIS to the face of America. Only in the white areas is there little or no erosion. Elsewhere wind and water have been allowed to denude or despoil land that should be our most treasured possession.


▥ means slight wind erosion.
▒ means moderate sheet and gully erosion.
▦ means moderate sheet and gully erosion with slight wind erosion.
▒ means severe sheet and gully erosion.
▤ means severe wind erosion.
▩ means mounts, mesas, canyons, and badlands.



AT HOME in a termitarium, the termite queen lays eggs steadily while the termite king stands by. As fast as the eggs are laid, termite workers haul them away for storage to the left. Placed in strategic narrow places throughout the termite tunnels, the armor-headed soldiers stand guard.





TERMITE workers are cream-colored or whitish, soft-bodied insects which are rarely seen by householders. Termite soldiers, darker in color, have long jaws and armor-plated heads. The winged termites (below) which householders see are future kings and queens looking for a new home.

Have You Termites In Your Home?

Here's how you can banish the destructive pest, if you want to follow a few simple rules worked out by experts in the Department of Agriculture

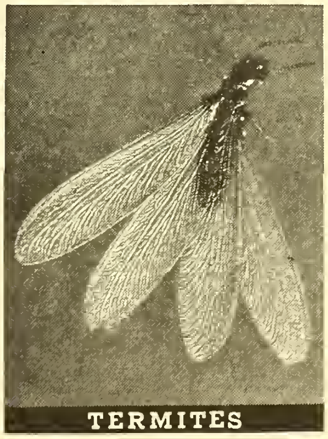
THE GENEALOGIST who attempts to trace the ancestry of a termite has a job cut out for him, for the termite, who is junior to his 200 million year old cousin, the cockroach, has a lineage that runs back 60 million years into the lush ante-diluvian swamps of what the geologist calls the Cenozoic Age.

Termites, which aren't ants incidentally though they are sometimes mistakenly called white ants, have acquired something of a reputation as antisocial insects. The truth is, however, that far from being antisocial, the termite is the most social of beings.

Take the termite's work habits. Day and night, 24 hours a day, from the moment he's able to turn an antenna for the cause. to the day of his death at the ripe, for an insect, old age of 5 years, the termite goes about his tasks doing public services without once turning aside for personal gain.

Termite colonies, and all termites live in colonies since the termite has no yen for being alone, have no labor problem. Even in termite metropolises with several million inhabitants there is work for everyone.

ALL EXCEPT ONE OF THE 1,997 KNOWN species of termites have castes with the members of each caste responsible for a particular kind of employment. Except for dry wood termites there are usually 3 castes: Workers, whose job it is to build the termite cities, to gather food, store away eggs, to massage the queen, and to feed each other and everyone else; soldiers, who are equipped with special jaws, or with a poison gas apparatus to defend the termite colony; and the kings and queens whose job it is to be fertile and multiply.



A termite colony often contains, besides termites, a horde of beetles and other bugs that are known as termitophiles, termite lovers etymologically, whose function is not known precisely, but which are generally regarded to be related to termites in the same way dogs, cats, sheep, goats, horses, and other domesticated animals are related to human beings.

Citizenship in a termite colony is evidenced by a characteristic termite odor so that anyone with the home smell may travel freely through the tunnels, corridors, and cells of the termite city. The moment a strange smelling visitor puts in an odor, however, the termites who are blind, sound the alarm by shaking their bodies convulsively and smacking their heads against the walls and floors of their tunnels and cells or by touching each other with their antennae. These alarms become a call to arms to the soldiers. They advance in battle order, squirting their poison gas, if they are tropical termites with a chemical warfare service, or displaying their mandibles and blocking lines of attack with their long armored heads if they are termites that are only equipped with infantry.

Hereditary enemy of the termite is the ant, though many birds, beetles, insects, anteaters, and other fauna, including men, attack the termite. Termite armies, however, are really no match in battle for anything much larger than an ant.

Biologists say termites have a cryptobiotic instinct. They shun the light of day and the eyes of the outside world. Instead they live in burrows in the ground, in cartons or hives that they build themselves, or in tunnels and galleries they engineer out of trees and lumber in buildings.

In the construction of the catacombs in which the wood inhabiting termites live, the outer shell of the timber is never destroyed and rarely pierced. A termite-ridden structure, no matter how thoroughly undermined, seldom falls of its weight. It remains intact until some outside event destroys it. A termite-infested floor in an uninhabited house may appear safe and normal, and if no one ever walks on it, or if unusually heavy furniture is not placed on it, it will stand up and look sound. Step on it, however, or move a piano in on it, or be unfortunate enough to undergo an earthquake and it may collapse. Fortunately such collapses on account of termites are very rare in this country.

So well do termites hide themselves inside their termite cities that frequently they carry on their occupations unbeknownst to anyone. To thrive, even to live, subterranean termites need the dark and the damp. Deprive them of the dark and they are discomfited; deprive them of moisture and they die.

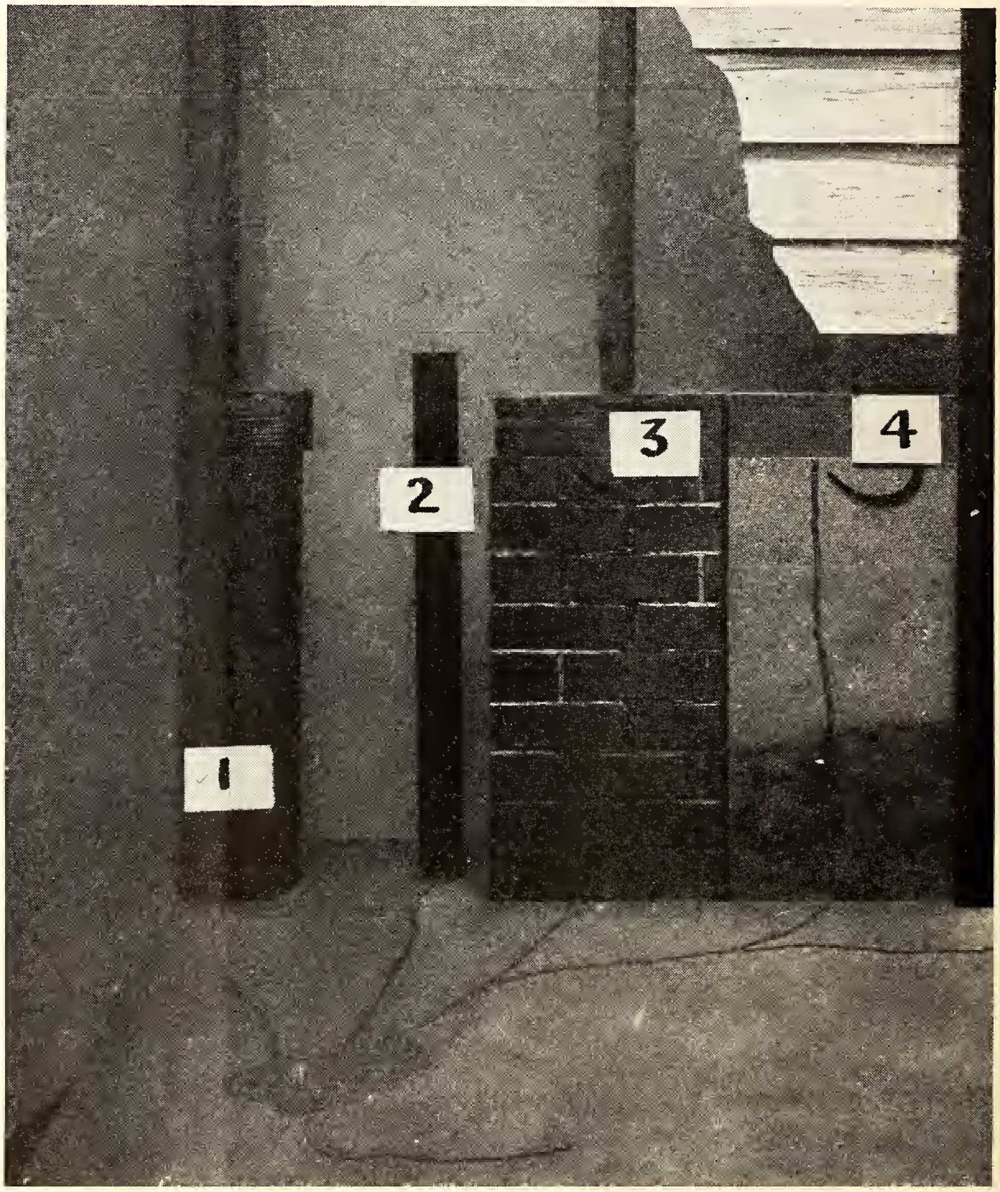
There is a moment in some termites' lives, however, when this instinctive craving for the dark and dank is replaced by an equally powerful compulsion to seek the light.

Periodically a swarming expedition made up of winged male and female reproductives sets forth from a termite city. They are the termite colonizers, and during the brief period of swarming they foreswear the traditional damp night of their termite city and issue into the world of light in search of new sites for termite colonies.

In preparation for the swarming, worker termites cut a hole (which they later close up) in the walls of the termite city, and then at a moment appointed by circumstances still unknown to scientists a swarm of termite reproductives emerges in a buzzing cloud.

While the termites are swarming they are a prey to birds and insects, but those that survive drop out of the swarm, pair by pair, a queen followed by a king, and stake out a termite homestead in a tiny aperture in the bark of a tree, in a decaying log, in a crack of wood, or in the ground depending upon

THIS SHOWS how subterranean termites get into houses: (1) They excavate galleries in wood which is in contact with the ground. (2) They extend tunnels along unprotected pipes coming from the ground. (3) They make their way through crevices in defective mortar, or (4) they build shelter tubes from wood and soil across surfaces that aren't earth or wood.

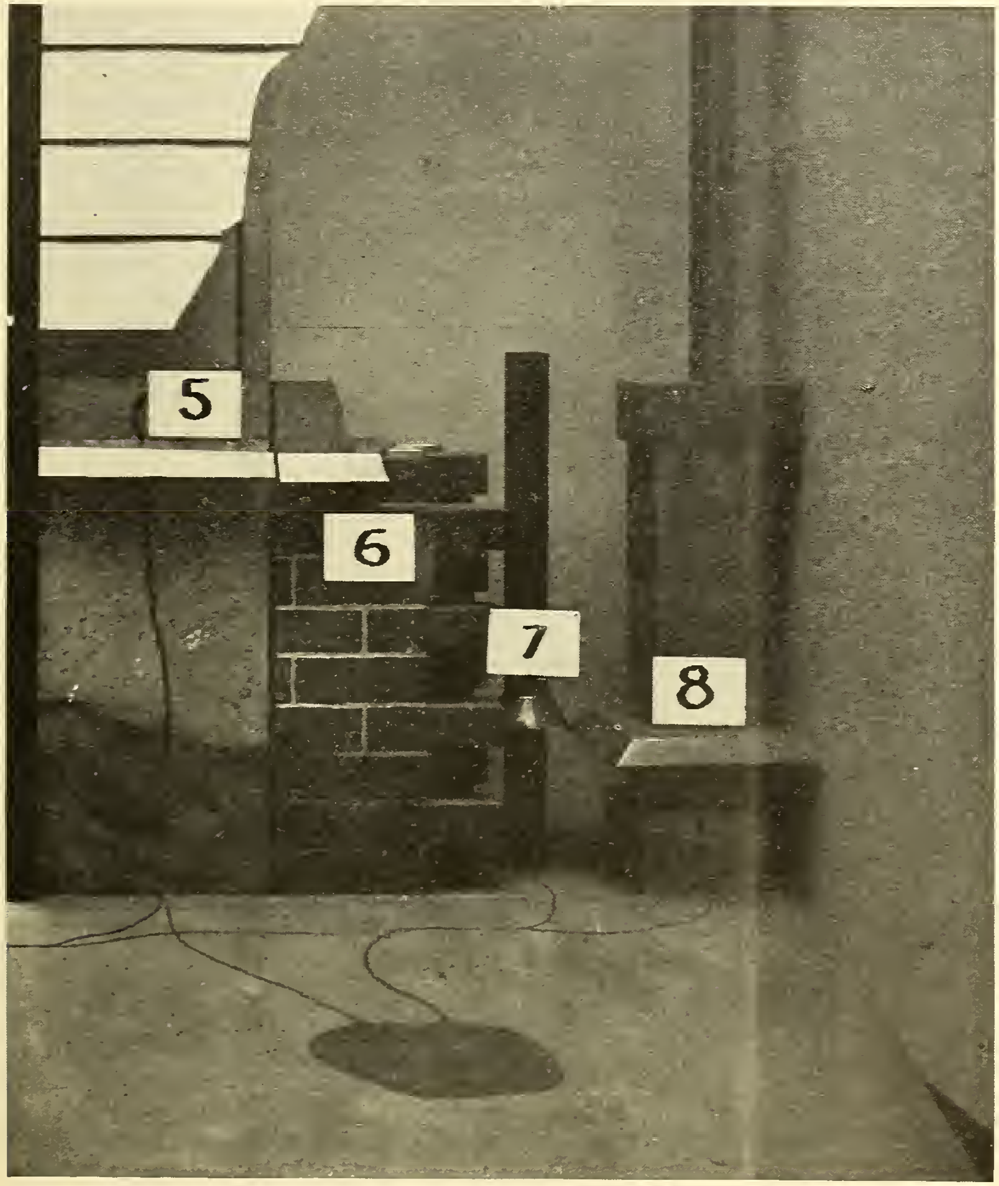


the variety of the termite and the environment it prefers.

At the end of the swarming flight the termite king and queen shed their wings and go about the work of building a colony with the same democratic lust for work that characterizes all early settlers. The king and queen together in the early stages of the termite colony get their own food, build their own home, and care for their own young. Not until the colony is well established and there are workers and soldiers enough to carry on, do the king and queen assert their royal prerogative to retire to the high task of race perpetuation.

Of the 1,997 or so species of termites known to inhabit the world there are 58 species colonizing actively in the United States. They are found in all the 48 States but they do most damage in the Southern, Central, and Pacific States. How much damage they do is not known, for frequently their presence in buildings is not suspected. Often, too, damage that has been done by termites is attributed to other causes. More often than not, however, damage due to rotting wood is wrongly assigned to innocent termites. Estimates of termite damage at best are guesses. For what they are worth guesses range from several million to 50 million dollars a year.

THIS SHOWS how subterranean termites can be kept out of homes: (5) Metallic shields embedded in concrete walls. (6) Brick walls can be capped with mortar and a metal shield. (7) Pipes can be ringed with metal shields. (8) Timber can be insulated from the ground with concrete and protected by metal shields.



TERMITES USUALLY MAKE THEIR PRESENCE known to householders when, either in the spring or fall, a swarm of the winged colonists emerges looking for a new termite frontier. Frequently householders apply a broom to these winged termites in the hope that killing them and sweeping them out of the house will end the termite invasion. Actually it is not these termites which cause the damage. The burrowers that undermine a building, or destroy books, or eat up clothes, are wingless, cream-colored, soft-bodied insects with 6 legs.

One clue to the termite's presence in a house is a termite tunnel, an earthenlike tube extending from the ground over stone, or pipes, or metal, or through hollow masonry to wood surfaces.

Just how far advanced termite destruction has gone in a house can't be ascertained by casual observation, but if books are found eaten, or floors soften, or wainscoting yields to a push against it, or wooden posts and pillars sound hollow when knocked, or if presumably solid wood offers little resistance to an ice pick, then very likely termites have worked their way at least that far.

TERMITE CONTROL, LIKE THE CONTROL OF most things, has two phases: preventive measures and remedial measures. Since people are usually more concerned about the actual presence of termites than about their potential presence, take the after-the-horse-is-stolen measures first.

To live, termites need cellulose and water. They find the cellulose in the wood structure of houses, in paper, in books, clothing, and the other paraphernalia of a house. Chief sources of water are leaking pipes, the sweat which accumulates in unventilated basements, and, most important, the earth.

Cut off the termite's water supply and the termites quickly die. A first measure in termite elimination, then, is to examine the house for leaking drains and pipes, and to repair them. Where the source of the termite water supply is sweat on walls or ceilings, a method must be found to ventilate the air spaces in which the sweating occurs.

In most cases, however, termites transport their own water from the ground through the little tunnels they build around pipes or across slabs of masonry. Punitive expeditions against termites in such cases call for a series of measures: First the repair or replacement of beams, joists, and boards that have been attacked by termites. In cases where these timbers come within 18 inches of the ground experts also urge householders to use timbers that have been impregnated

[*Concluded on page 15*]

So You're Going To Buy an Electric Washing Machine?

With no quality standards to guide your choice, these tips on machine construction and operation, garnered from Bureau of Home Economics' experts, can help to steer you to a good buy

UNTIL SCIENCE walked into the home and put electricity to work for the family, wash day was probably the bluest-lettered day of all. Now, in this push-button, flip-a-switch age, homemakers can walk up to Monday and look it cheerfully in the eye because electric washing machines have banished much of the drudgery and toil involved in keeping the family spick and span.

That, of course, is on the supposition that they have the wherewithal to swing the capital expenditure for a washing machine in the first place. When a machine may be priced anywhere from $39 to 2 or 3 times that much, many families are as free to consider buying a washing machine as a trip around the world. Too often other household needs—foods, shelter, heat, clothing—must take precedence over the capital purchase of an automatic washer.

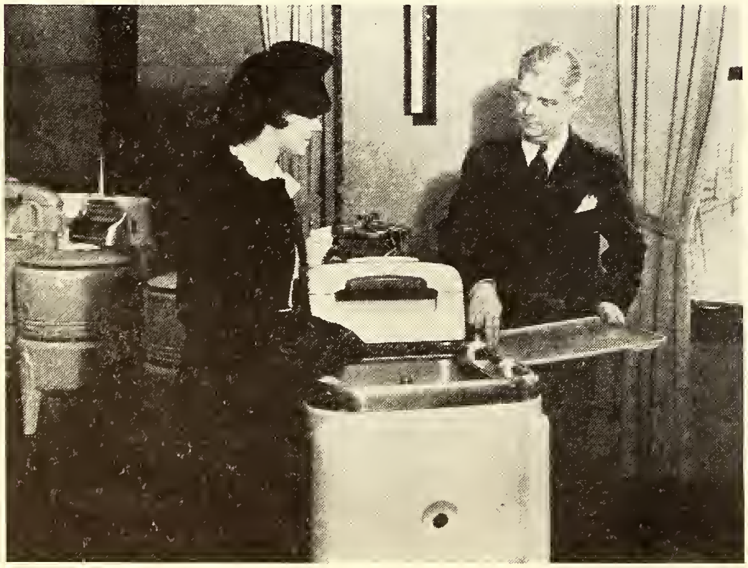
Two Government bureaus made an estimate of the number of motor-driven (both electric and gasoline) washing machines in the Nation's homes in 1935–36 and discovered that we are still not a country with a washer in every kitchen. Results of the study so far completed—covering small cities, villages, and farms—show that low-income families, for the most part, rely on washboard and tub to get the family laundry done.

About 70 out of every 100 nonrelief families in small cities in the north central plains and mountains, and Pacific areas of the country possessed motor-driven washing machines. In cities in the southeast, contrariwise, only about 2 white nonrelief families in every 100 owned a washer, while none of the nonrelief Negro families in the same area reported that they had power machines.

In villages, the picture was roughly similar for the same sections of the country. New England village families reported only 54 out of every 100 families owning machines.

Farm areas, where electric lines are often few and far between, made an unexpectedly good showing, with the exception of the

IS the machine well constructed? Observe carefully each part and feature of a washer before you buy. Look for deeply curved legs, rubber interlining where metal touches metal, wheels that lock in place. Sharp edges, exposed rivets, or screws may mean future difficulties. Machines that can be adjusted for different working heights are an extra convenience.



CAN the machine be cleaned easily? Most finishes, with the exception of copper-nickel, are easy to clean. One efficiency note to remember is that the washing mechanism should be removable to facilitate cleaning. The mechanism that comes off without need of pliers or screw driver is the simplest arrangement. Remember to ask for complete directions for cleaning.

South where only rarely did a nonrelief farm family say it owned a washer. In some States—California, Illinois, and Iowa—65 farm families out of every 100 were found to own either gasoline or electric washing machines, and those owning hand machines brought total ownership up to 84. With the exception of the southeast, in no section did washing-machine ownership fall below 60 percent of the nonrelief, farm families covered.

NO QUALITY STANDARDS FOR ANY TYPE OF washing machine have been evolved by any Government agency, but experts in the Department of Agriculture and in the laboratories of some experiment stations have investigated beyond the price tags of all types of machines and listed a number of simple buying tips for the prospective purchaser of electrical machines.

First, they say, look to the size of your family wash before you decide on the size of your washer. A good machine should tell on the label the number of pounds of dry clothes it can handle at one time. Insist on this information; capacity of washers measured simply by the number of sheets it will hold, or by some similar standard, is apt to be misleading.

For the average-size family, a tub with a capacity of 7 or 8 pounds will suffice. If your laundry runs large every week, a machine holding at least 9 pounds of clothing would be more appropriate. Small machines—some of them hardly more than table models—are useful for doing small pieces; they are inefficient if you do your entire laundry at home.

MECHANICAL HEART OF THE WASHING MAchine is the washing unit. There are 3 basic types: Agitator, vacuum cup, and cylinder. The agitator type contains a series of metal fins attached to a revolving axis. There are a number of variations. Some have the fins straight up and down; in some, they are suspended from the top of the axis; in some, they are spiral-shaped. Usually, the agitator revolves back and forth, driving the water through the clothing, and keeping the clothes in motion.

The vacuum cup type consists of 3 or 4 bell-shaped cups which clean the clothes by moving up and down as well as in a circular direction.

In the cylinder type of washer clothes are packed within the perforated cylinder which usually moves back and forth in the tub, driving the water through the holes, at the same time that it keeps the clothes in motion.

BUREAU OF HOME ECONOMICS RESEARCHERS point out that there is no cut and dried rule to follow in deciding on which type of washer you want. Two washers with exactly the same type of mechanism may be totally different in results.

A smart rule is to ask to see the washers in action with a tub full of clothes. The machine that churns and drives the water through the fabrics may shorten your working day; but it may also be harder on the clothes. A machine with gentler action, according to the Bureau of Home Economics, will take longer to finish the job but will give less rough treatment to the fabrics.

Economy arguments about the faster machine saving on electric costs are questionable. The ordinary machine uses so little current that a few minutes more or less are nothing to worry about. Bureau of Home Economics experts estimate that the average machine uses about 250 watts of electricity. If your electric cost is 4 cents per kilowatt-hour, it would cost you only 9 cents a month to use your machine an average of 2 hours per week. Costs may vary a few pennies one way or the other with different machines and in different localities. But the difference is so small as to make the saving of any sizeable sum out of the question.

WASHING MACHINES ARE MADE WITH A number of different types of materials, chiefly porcelain-enamel, aluminum, monel metal, stainless steel, and nickled-copper.

Moderate in price, easy to clean, porcelain-enamel tanks are made by applying several coats of vitreous porcelain-enamel to sheet steel. At least 3 coats of the enamel should be sprayed on the tub; additional coats improve its appearance but also make the finish more brittle. Enamel finishes are apt to crack or chip in time. With ordinary care, good enamel should not do this, but it is wise to ask for a manufacturer's guarantee when you buy.

HOW safe is the machine to operate? Look for an emergency release on the wringer, that's easy to reach and works instantaneously. The release should also automatically cut the current. Put a wooden platform or rubber mat beneath the machine and operator to guard against shock hazards. Don't touch controls with wet hands.

HOW simple is operation of the machine? A bad point on the model below is a control switch out of easy reach; it should be at the top of the machine. Good points are the automatic drain, and the sturdily constructed wringer that can be swung in any direction without wobbling or losing balance.

Aluminum—either drawn or cast—overcomes this shortcoming of enamel, but its liability is the difficulty of keeping it clean and free from stains. The smoother the surface of the aluminum, the easier it will be to clean.

Copper-nickeled tanks are strong, durable, and low in cost, but require persistent vigilance to keep clean.

Monel metal is an alloy of nickel and copper, and it is not to be confused with the copper-nickeled tanks. It is strong, wears well, is fairly easy to clean, but usually has a price tag above that of the other types of machines.

Stainless steel ranks with monel metal as the aristocrat for washing tubs, but its high price puts it out of reach of ordinary budgets.

Axiomatic among washing-machine buyers should be this rule: A washer is no better than its frame. First step in estimating the strength of the frame is to examine its legs. Strongest legs are of cast or pressed steel, deeply curved, and even completely tubular at the bottom. Legs with only shallow channeling may bend after a long period of time unless very well braced to the frame. Casters (wheels) of the washer should be made of rubber to muffle noise, should move easily in all directions, and should lock in place to prevent vibration when the machine is operating. The legs should also be adjustable to different heights. That makes it simple to level off the machine on an uneven floor, and to adjust its height to the best working position.

BODY OF THE WASHER SHOULD BE OF FIRM, rigid construction. Rubber interlining at points where metal touches metal makes for quiet operation. Worst failing of any tub is a sharp edge or point to catch clothing and fingers. All edges should be rounded off, and screws and rivets smoothed and concealed, if possible. Well constructed machines have the fewest possible number of screws or rivet heads on the inside of the machine.

The washing mechanism itself should be easily removable without the need of pliers or screw driver so that it can be cleaned and dried after each time it is used.

Top of the tub should be lined with a small "shelf," slightly inclined inward, to control splashing. At the same time the opening of the tub should be large enough to facilitate putting in and removing clothes.

Cover of the machine may be removable or on hinges. On hinges, it becomes a handy shelf when opened and eliminates the task of taking off the cover and putting it on again each time clothing is added.

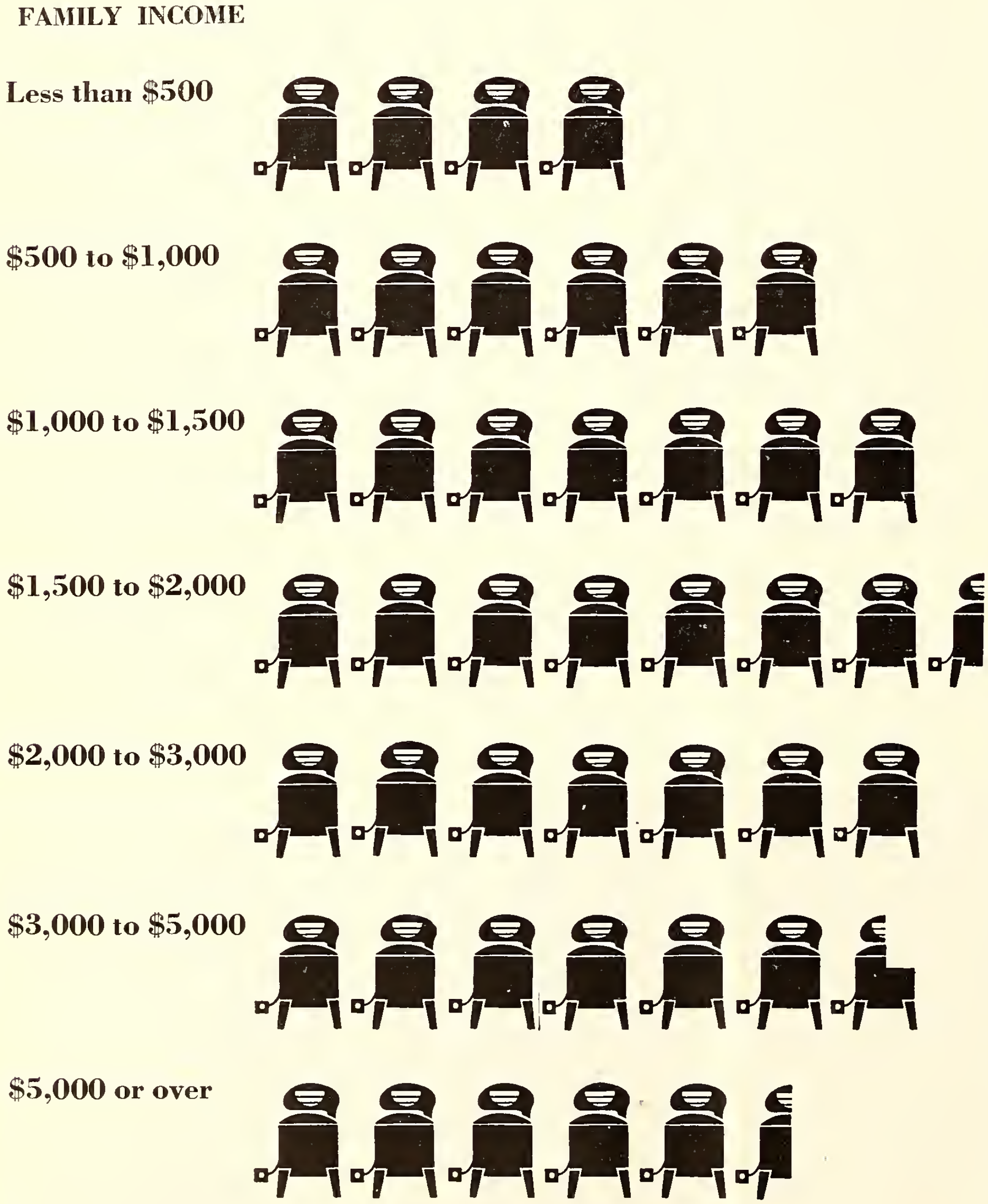
No matter what type it is, the cover should be heavy enough to avoid vibration when the machine is in operation, and should have a rubber lining around the rim. Some researchers have found that a clamp to hold the cover down when closed is an extra advantage.

A WRINGER HAS TO BE A LOT OF THINGS, BUT most of all it must be safe. That requires a safety release or button, easily reached, and with instant action behind it. It takes only a second for a severe injury to happen when a finger or hand gets caught in the rollers. First safety rule is to get a wringer with a release that works easily. The release should not only spread the rolls, it should also automatically cut the power when touched.

Observe the rolls of the wringer carefully. These should be easily accessible for cleaning and wiping, with all gears enclosed and no loose joints where oil might drop on

THEY HAVE MOTOR DRIVEN WASHING MACHINES

Out of every 10 nonrelief families in small cities in the North Central area, these reported (1935–36) they owned motor driven machines*



**Many families now at low income levels once knew better days. The record does not show when these machines were purchased. Probably many were acquired by the very low income families when times were not so hard.*

clothes. As to choosing between rolls of hard rubber and rolls of soft rubber, you will have to make your own decision. No research so far has conclusively proved the advantage of one over the other. Hard rolls may injure buttons or hooks, but they last longer. Soft rolls are said to adjust more easily to various thicknesses of material, to be easy on buttons, but to wear out more rapidly. Some manuacturers compromise with either two semisoft rolls, or one hard roll and one soft one.

Ask to see the wringer in action before you buy. Then you can tell for yourself how efficient is the safety release, and whether or not the drain board reverses itself automatically, as it should. Swing the wringer into various positions to be sure it doesn't wobble or lose balance when set away from the tub.

For budgets that allow it, the extra expenditure for a "spinner basket" in place of a wringer is a worthwhile investment. These devices make clothes lose much of their moisture by whirling them. When the moisture has spun through the extractor, the clothing is ready for the line, and, in some cases, can be ironed damp-dry. Spinner dryers don't tear fabrics or injure buttons or put heavy creases in the clothes. They do away with the risk, present with the clothes wringer, of a mashed hand.

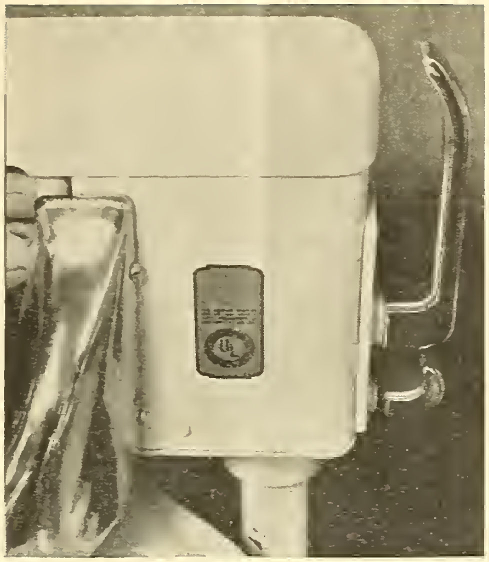
If you can afford one of these, be sure all the rotating parts are enclosed. A safety feature to look for, in a high-speed drier, is a cover that can't possibly be removed until the spinner has stopped revolving. Make sure the spinner basket is removable so that it can be cleaned and dried after each wash.

An automatic pump on the machines with a permanent-attached hose which may be hooked over the rim of the sink or laundry tub for draining, is an added convenience.

Another type of drain fastens to the faucet with one end in the tub and the other in the sink. When the faucet is turned on, the resulting suction forces the water out of the tub. This may be purchased separately but does not come with the machine.

Most inefficient type of drain is the drain cock at the bottom of the tub which must be opened or shut as needed. Not only is this inconvenient to get at, but it also is a potential source of leakage.

Housewives aren't usually electrical engineers. Choosing an efficient motor, in the absence of quality standards, is naturally, therefore, a difficult task. To get a motor that will work efficiently and won't need replacement after a few months of use, ask for a guarantee against a defective motor or defective wiring in the machine. Be sure the label attached to the machine gives the name of the manufacturer, the serial number of the machine, whether it is for alternating or direct current, its voltage and wattage rating, and, if for alternating current, the number of alternating cycles it is intended for. Check with your local power company to be sure the motor meets the needs of your household current.



THIS LABEL on a washing machine and other electrical appliances is approved by the Bureau of Home Economics as an indication of safety. It means the machine meets safety standards of Underwriters Laboratories, Inc., a non-profit organization that makes safety tests of electrical appliances on manufacturers' requests. This label does not indicate the quality of the machine.

Power needed for a washing machine is one-quarter horsepower. The motor should be well-incased in the machine to protect it against dust and grime. And it should be self-oiling.

Wiring should be insulated with heavy, flexible, rubber tubing. So far as possible the wiring should be built into the machine, not attached to the exterior surface. At no point should it be exposed to the metal parts of the machine, and there should be plenty of free cable to reach a convenient plug outlet. Once a year have the wiring checked by an electrician and replace any cable which has bad insulation.

A wooden platform or rubber mat large enough to hold both machine and operator is the best check against electric shock caused by wet hands coming in contact with exposed current. Don't stand on a wet surface when operating the machine.

There is a safety standard which you can rely on, and which is approved by the Bureau of Home Economics. Here is what the Bureau says: "All electrical appliances should be tested for safety. The best check you can make on this point is to look for the Underwriters Laboratories, Inc., approval. This nonprofit organization makes tests for safety of electrical appliances on request from a manufacturing company. It is maintained for service to examine and test equipment for hazards against shock and fire, and does not rate one brand or model against another.

"If this laboratory regards an appliance as safe it will either label it or list it in an approved list of appliances."

When you buy a washer, look for the approval label of the organization or ask the salesman for a list of the washers meeting the standard. If he does not have the list, he can get it for you.

All switches and controls of the machine should be within easy reach, not hidden away at the bottom of the tub, making it necessary to stoop or bend over every time you want to turn the power on or off.

Ask for complete instructions to care for the machine, and follow them to the letter. Wash, completely dry, and air the machine after each use. Any removable parts—such as the agitator—should be taken out and thoroughly wiped, and the wringer should be released before cleaning. Lubricate the machine only as the manufacturer advises, but always be sure the connecting plug is out of the socket before you do this. Stains may be removed with a fine scouring agent, hot vinegar, or a solution of soapsuds and ammonia. Finally, don't overwork your machine. Too many clothes in the wringer or in the tub harms the machine. Likewise, filling the machine over the water line reduces its efficiency and results in splashing.

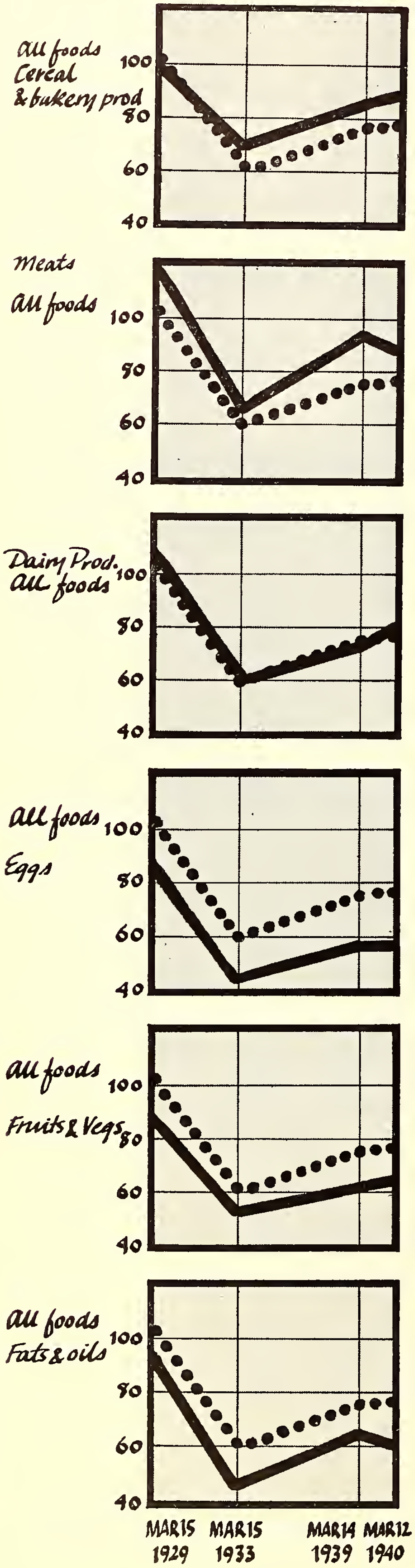
Check these points when you buy a washer:

1. **Capacity in terms of pounds of dry clothes.**
2. **Type of agitator.**
3. **Material machine is made from.**
4. **Construction of legs and tub.**
5. **The wringer.**
6. **The cover.**
7. **The drain.**
8. **Electrical equipment.**
9. **Protection against shock hazards.**

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE

(1923–25=100)



FOOD COSTS. Price reductions in most major food items between February and March carried retail food costs in general back to the level which prevailed in mid-January prior to the increase due to unusually cold weather. Notwithstanding this decline, retail food costs were slightly higher (1 percent) than last March. Except for 1939, however, they were the lowest for any March since 1934.

Decrease in food costs was most pronounced in eggs and butter, reflecting seasonal increases in supplies. The only major food group which advanced in cost during the period was meats. This increase was due to higher prices for poultry, lamb, and fresh pork which offset decreases in beef and cured pork. Compared with last March, all major food groups except meats and fats and oils were higher.

FOOD SUPPLIES. Unfavorable weather conditions during the first third of 1940 have hampered vegetable production. As a result, it appears that supplies will be smaller than last spring and will move to market later than usual. This delay in marketings may result in an overlapping of marketings from several areas and the consequent piling up of supplies in late May or June. Tomato production in particular has been quite adversely affected by weather, and marketings in May are not expected to come up to 1939 levels.

STRAWBERRIES. Heaviest marketings generally come in late May or early June. Supplies this May are not expected to differ much from 1939.

CITRUS FRUITS. Summer oranges, which ordinarily are marketed from May through October, are expected to be slightly more plentiful than last year. Grapefruit supplies during the remainder of the spring and summer are expected to be below 1939 levels.

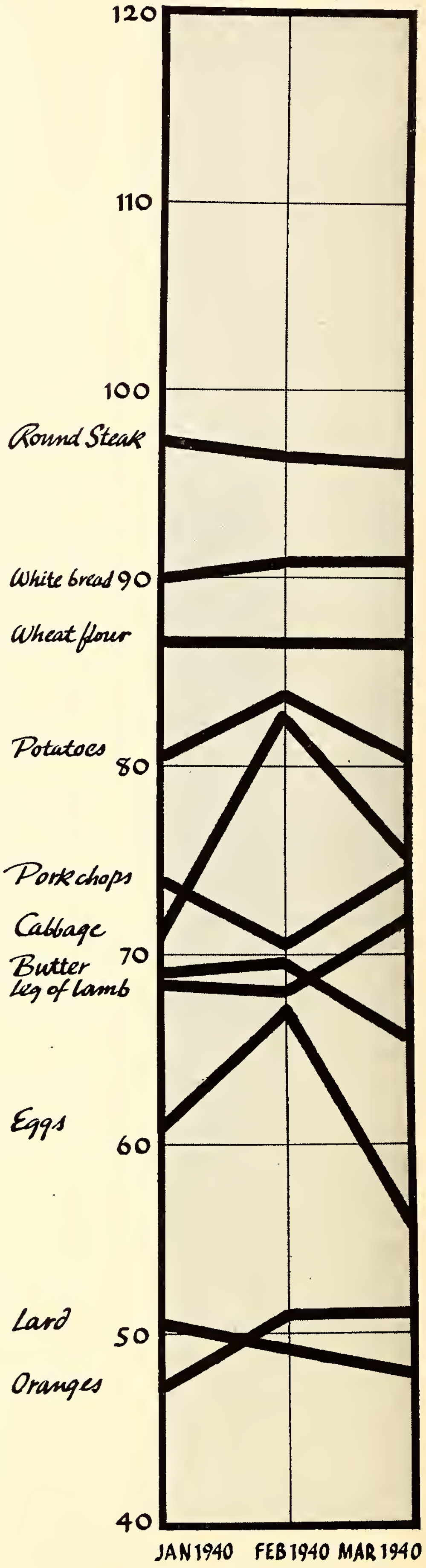
EGGS. Marketings in May are not expected to equal April levels, when they ordinarily are at their high point, but they are expected to be larger than last May.

MEATS. Pork, lamb and better grade beef most likely will be more plentiful than last May, but smaller supplies of lower grade beef are in prospect.

CANTALOUPS. Supplies in May come primarily from California. May be smaller than last year due to reduction in acreage.

A CLOSE-UP

(1923–25=100)



HAVE YOU TERMITES IN YOUR HOME?

[*Concluded from page 9*]

with termite-resisting chemicals by a standardized pressure process. The same strategy calls for the creation of mechanical or chemical barriers to prevent the passage of termites from the ground into the building. Chemical measures against termites, however, are impermanent.

Before any expensive alterations or measures are undertaken, it should be determined whether or not termites are really responsible for the damage done. Specimens of the insects apparently responsible for the damage should be sent either to the State Agricultural agency or to the Federal Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture. At the same time this is done, householders are well advised to request literature on termite control.

Once the termite identity has been established, if the invasion is not too far advanced householders themselves can often take the termite situation in hand themselves.

When householders feel they must have help, however, the United States Department of Agriculture says, any reliable building contractor who knows termite habits and the principles of termite control can repair termite damage and prevent further ravages by them.

Where there is termite infestation a survey should be made to see if—

(1) Wooden floors, joists, or any other wood in the building are in contact with the earth.

(2) Debris has accumulated under porches, or in basements, or against the side of the house.

(3) Termites are penetrating through masonry piers, or defective mortar work.

(4) Termite tubes have been built over pipes, or masonry slabs, or concrete.

Where there is debris it should be removed and burned. Where wooden floors are infested because of contact with the ground, they should be torn up and removed. In replacing these floors, the ground underneath should be excavated to a depth sufficient to provide for an impenetrable layer of concrete. There should be at least 2 inches of concrete between the wooden screeds or sleepers and the ground. Sleepers should be impregnated with a standard preservative. They should not be buried in the concrete, instead they should be set in grooves or enclosed by metal fasteners. Information on satisfactory wood preservatives may be obtained by writing to the Superintendent of Documents, Washington, D. C., and requesting Federal Specification TTw571A. It costs 5 cents in cash.

Where uprights, or joists, or door jambs are replaced they should be provided with cast iron or concrete bases.

Where the termites have entered through hollow concrete piers or through loose plaster or cement, the plaster or cement must be replaced and the hollow piers capped with new cement, or with metal shields. If it is impractical to cap the concrete piers, chemical warfare can be used against termites for temporary relief. In this case, bore holes in the pier and pour in a chemical liquid called orthodichlorobenzene (it can be purchased from a manufacturing or wholesale chemist) allowing 1 gallon for each 10 feet of hollow masonry.

Termite shields should be placed on walls underneath closed-in porches, sun parlors, steps, and in places that are so walled up that inspection is not possible, provided of course the cost of installing the shields is not exorbitant. These metal plates made of noncorroding metal, usually copper, project 2 inches beyond the posts and then turn down 2 or more inches at an angle of 45 degrees. Similar shields should be placed 18 inches above the ground on all inside pipes which run into the earth in partially excavated areas. Where pipes penetrate floors or masonry walls, they should be well sealed with coal-tar pitch. These shields prevent termites from extending tunnels from the ground to the woodwork in the building.

Trellises and fences should be kept at least 2 inches away from the building and shrubs should stand far enough away from the building to permit easy inspection of the walls.

Where these measures are too expensive, or impracticable, a spot of chemical defense may be tried.

One satisfactory method of attacking termites chemically consists of digging a trench 30 inches deep and 12 inches wide around the infested foundation walls and piers. All wood debris should be removed during the digging and termite shelter tubes, if there are any, should be broken up. The trench should then be saturated with full strength orthodichlorobenzene, 1 gallon for each 10 feet. After this treatment has been applied, the soil should be replaced to within 3 inches of the surface and the treatment repeated. Orthodichlorobenzene irritates the skin when you touch it, and it is painful if it gets in the eyes. It also generates nauseating fumes if you are exposed to them too long within a confined space. Almost equally effective, and somewhat easier to use, is a mixture of coal-tar creosote and kerosene; 1 part creosote to 3 parts kerosene. Since this chemical is less penetrating than orthodichlorobenzene, twice as much of it must be used, that is 4 gallons for each 10 linear feet. When the trench saturated with the creosote and kerosene mixture is refilled the earth should be stirred up so the liquid will permeate the soil. Both chemicals are poisonous to plants.

All these measures are for people who think about termites after the damage is done. Consumers who are building or who intend to build homes can outwit termites by taking a few precautions at the time the house is built.

Insurance against termites at very small cost can be obtained if the following building precautions are taken:

(1) Treat all structural wood which touches the earth or comes within 18 inches of it with a termite repelling preservative.

(2) Make the lower 5 or 6 inches of door casings in basement rooms in the form of a solid concrete block rising from and continuous with the floor.

(3) Lay masonry foundations and footings in cement mortar, with all joinings filled and pointed.

(4) Cap all masonry piers, whether solid or hollow with 2 inches of reinforced cement masonry, or with mortar and slate, or with noncorroding metal.

(5) Provide the top of all masonry unit foundations, pillows, supports, and pipes with metal termite shields. This need not apply to solid concrete walls surrounding full excavations, unless they are next to closed-in areas which cannot be inspected regularly.

(6) Where part of the earth under the house (under sun parlors and porches) is unexcavated, clear the earth away so that none of it comes within 18 inches of wood, and see to it that this space is ventilated. Here experts urge householders to plan openings to enable them to get inside the walls and look around occasionally.

Communities can take effective action against termites by incorporating antitermite provisions into their building codes. Such regulations require all new buildings in a community to include precautions against termites. Copies of the recommendations the Department of Agriculture has worked out may be obtained free by writing to the Federal Bureau of Entomology and Plant Quarantine, Washington, D. C. Ask for Brief E 338.

IN THIS ISSUE

APRIL 15, 1940 ● VOLUME VI, NUMBER 14

Does Its Price Tell Its Quality? . . . 2

Look to the Soil 3

Have You Termites in Your Home? . . 7

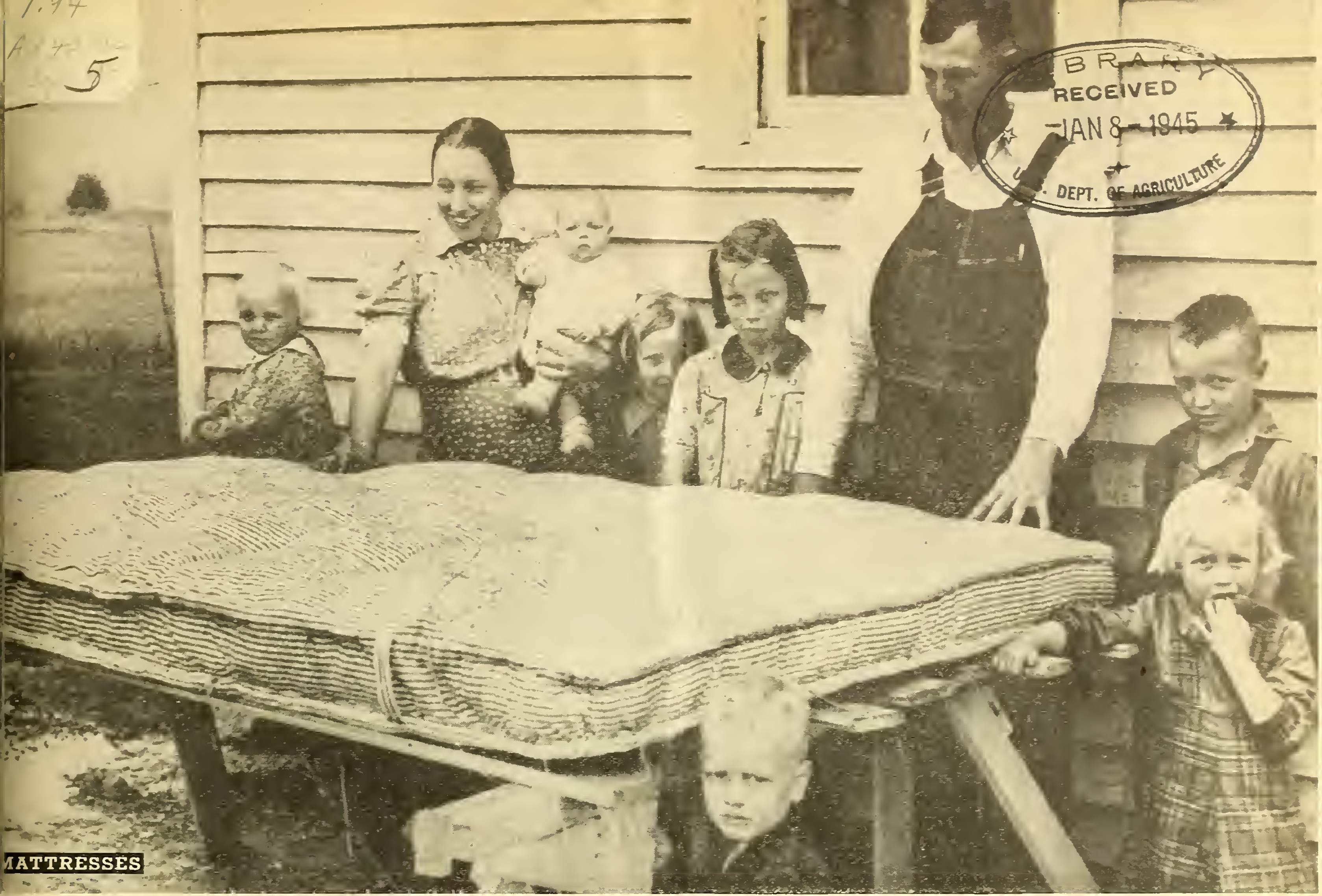
So You're Going To Buy an Electric Washing Machine? 10

Your Food Supplies and Costs 14

U. S. GOVERNMENT PRINTING OFFICE 224482°

1.94
5

LIBRARY
RECEIVED
JAN 8 - 1945
U.S. DEPT. OF AGRICULTURE



MATTRESSES

CONSUMERS' GUIDE

MAY 1, 1940

SOIL CONSERVATION

SEEDS

LARD

CONTAINERS

CONSUMERS' GUIDE

MAY 1, 1940 VOLUME VI, NUMBER 15

A Publication of the
Department of Agriculture
Washington, D. C.
Issued monthly from June through
September; Semi-monthly from
October through May
Prepared by
Consumers' Counsel Division

D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

THERE ARE TWO NEW COLORS in the drug and cosmetic rainbow. Unromantically named, they are D and C Green No. 8, and D and C Red No. 39.

No swain is ever going to sigh to his amour that her hair is the color of D and C Red No. 39. But the chances are that D and C Red No. 39, when dabbed on her lips as lipstick, may inspire him to say something.

The two new colors have just finished a thorough testing period in the laboratories of the Food and Drug Administration. After subjection to every relevant scientific test there is, it has been decided that the two new colors are safe for use in drugs and cosmetics. That's what the "D and C" stand for: D for drugs, and C for cosmetics. The numbers serve to identify the particular color.

Guinea pigs assisted in the tests used on D and C Green No. 8 and D and C Red No. 39. First the colors were injected underneath the skin of guinea pigs for 10 consecutive days. Then the guinea pigs were given a 2 weeks' rest and the injections were repeated. The guinea pigs took these injections in their stride, without whimpering or showing any adverse effect, except perhaps to color up inside a little. The colors passed their first test.

Next 3 sets of white rats were established in a laboratory housing project. The first set of white rats got a normal diet, the second set got a normal diet plus D and C Green No. 8, while the third set got a normal diet plus D and C Red No. 39. This went on for 14 weeks, with the Food and Drug pharmacologists keeping a sharp eye on the rats all the time, and charting the food consumption and growth of the rats each week.

At the end of the 14 weeks, the D and C Red rats, the D and C Green rats, and the rats on normal diet all were thriving to the same degree. That meant the colors had passed another test.

Next episode in this series of animal adventures was a regime of feedings with a stomach tube. A large number of rats and mice were dosed with D and C Red and Green by means of a stomach tube. The results again showed that, used this way, the colors were still safe and harmless.

In the meantime, other studies were proceeding, too, all of them designed to test the safety of these colors when used to tint drugs or cosmetics.

In the end, the Food and Drug Administration laboratory workers convinced themselves that the new colors were safe. Thereupon the Department of Agriculture added them to the list of coal tar colors which may be used in the manufacture of drugs and cosmetics.

Of course, the approval of these colors is only a general license for drug and cosmetic manufacturers to use them. But before any colors, made up according to the approved formulas for them, may be used in drugs or cosmetics, samples from each batch of the coloring matter manufactured must be submitted to the Food and Drug Administration for certification.

All this work is done under the provisions of the Food, Drug, and Cosmetic Act of 1938 which apply to coal tar colors. These sections require that the Food and Drug Administration must certify as harmless and suitable for use batches of all coal tar colors used in food, drugs, or cosmetics which enter interstate commerce.

CARRIED AWAY BY, IF NOT CARRIED BACK TO, old Virginia, a New York corporation sold its Chicago corned beef hash and its Maryland processed deviled ham, as Virginia corned beef hash and Virginia deviled ham.

To make the Virginia illusion credible, this company maintained an office in Richmond, Va., from which all of its invoices were mailed.

It also supplied stickers to go on menu cards in drug stores and restaurants which said that Virginia corned beef hash and Virginia deviled ham were featured there.

Since the home town of the hash was Chicago and the home town of the ham was Cambridge, Md., the Federal Trade Commission ordered the company to stop using the name Virginia, to stop the use of the Richmond, Va., invoices, and to stop representing that its products were Virginia products unless they came from animals grown in Virginia and, in the case of ham, unless they were cured by the Virginia process.

Both of these meat products were U. S. Inspected and Approved, as they must be, by law, to enter interstate commerce. And as all labels for meat products in interstate commerce must be approved by the Department of Agriculture, these labels had also been approved.

The Department of Agriculture did not go behind the label; its power of approval is limited only to approving the way in which a label is phrased and designed. The truth of label is the manufacturer's responsibility. In the event that he says something untrue, he is liable to prosecution.

In this case, when the facts were ascertained, the Department of Agriculture withdrew its approval of the offending labels.

CONGRESS NEEDED only 13 words to outlaw misleading or deceptive containers of foods, drugs, and cosmetics from interstate commerce. It shall be illegal, Congress said, in the 1938 Food, Drug, and Cosmetic Act, for any one of these products to cross State lines "if its container is so made, formed, or filled as to be misleading." This part of the Act became effective on June 25, 1939.

So well have manufacturers of foods, drugs, and cosmetics cooperated in enforcing this provision of the law, that some misleading or deceptive containers, many of which found their way to food and drug counters only a few months ago, are today so rare as to be almost collectors' items.

The Food and Drug Administration has the power to define standards of fill for food containers. Packages of foods that fail to meet the prescribed standard must declare that fact on their labels. The law does not grant the same power to set standards of fill for drugs and cosmetics. Only if the Food and Drug Administration finds the container of any one of these products is deceptive or misleading can they take steps to make it shrink to proportions.

On pages 10 and 11 of this issue we attempt to picture 10 different products whose containers have been changed since this part of the Food, Drug, and Cosmetic Act went into effect. Even though consumers now have a better chance of judging the contents of what they purchase by the appearance of the container, smart consumers still *read the label* and *compare the net contents* of different containers.

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.

Sleeping on Surplus Cotton

A new Federal Surplus Commodities program channels part of the cotton surplus into mattresses to make sleeping a little more comfortable for some low-income families

BED BEING THE PLACE where an ordinary human being spends anywhere from one-third to one-half his life, it's not surprising that some attention should be paid to mattresses.

Right now in hundreds of counties through the South the small fry of a number of farm families are standing around in high school gymnasia, church club rooms, city halls, and other places, cheering on their papas with a "Whack it, Dad." At the moment, with the coat and vest of his store clothes hung up in a corner, Dad is wielding an instrument that looks like a baseball bat on a mattress that is laid out on a table while Mamma and the children watch. He is putting the finishing touches on a mattress the whole family has made out of cotton and cotton ticking furnished by the Department of Agriculture's Federal Surplus Commodities Corporation.

There isn't an official slogan for this program, but it could be: "Let's sleep comfortably on at least a corner of the cotton surplus."

A small part of America's surplus cotton (on July 31, 1940, it is estimated there will be 9½ million bales of American cotton above normal requirements for the year) is now being turned over to American farm families who can't afford to buy mattresses so they can make their own.

Until very recently the only statistics available about mattresses were the kind ordinary people compile while they count sheep. In 1935–36, however, a number of Government agencies including the WPA and the Bureau of Home Economics undertook what was called the Consumer Expenditure Study. With the aid of thousands of field workers and the cooperation of more thousands of American families, an attempt was made to find out how American families actually spend the money they earn.

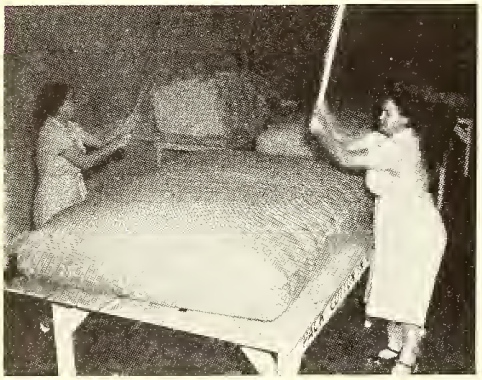
Poor families, it was learned, have no bed of roses if it's bedding you're talking about.

If yearly purchases of mattresses are any indication, the bedding situation of families in small cities with incomes of less than $500 annually was less than a third as rosy as that of families with incomes of $1,500 to $2,000. Thus 3 out of every 100 families with incomes of less than $500 bought mattresses during the year 1935–36, while 11 out of every 100 families with $1,500 to $2,000 incomes bought mattresses in the same year. Among farm families, 4 out of every 100 with $500-and-less incomes bought a mattress, while 9 out of every 100 in the $1,500 to $2,000 class made such purchases.

Nor is that the whole story. While the

Farm families pack 50 pounds of FSCC cotton, layer by layer, into 10 yards of 6-ounce cotton ticking in the first step on the way to a new double mattress.

Once the ticking is stuffed with cotton and batted lightly to make the fibers interlock and to distribute the cotton evenly, the women in the farm families pin up the ticking.


The strong-armed member of the family takes hold of a broomstick and gives the mattress a thorough beating. Roll edges are sewed up, the mattress is beaten again, tufts are sewed in, and then the mattress is ready to go home.

Next step in the make-yourself-a-mattress program is to sew up the ticking.

poorer families (everyone really knows this without ever thinking about it) bought far fewer mattresses, they spent far less per mattress. Among farm families for example, the families with incomes of $1,500 to $2,000 spent an average of $16 for an innerspring mattress, and $7.62 for a non-innerspring. The families with incomes of less than $500 slept on mattresses (when they slept on bought mattresses at all) which cost an average of $9.76 for an innerspring and $4.17 for the other kind. Of course a larger proportion of innerspring mattresses was purchased by the families at the luckier level of income.

After running these statistics, and more like them, through the tabulating machines, and after microscoping them for whatever meaning they had, economists came to the conclusion that any program that could give mattresses to people with low incomes would add to the comfort and well-being of these families without affecting the ordinary commercial market for mattresses at all.

Such a program, in fact, has been in operation for most of 7 years for families receiving public assistance. Since October 1933, the Government has turned over to Federal, State, and local relief agencies 260,000 bales of cotton—that's 130 million pounds—to be made into mattresses and comforters. Some of the families mattressed and comfortered by this cotton are rural families; more of them are city families.

With american cotton supplies this year the second largest ever, the economists turned their spotlight on other families—those not necessarily dependent on public assistance but shackled nevertheless to a miserable standard of living by meager incomes. More than a million nonrelief farm families, in 1935–36, were struggling along on incomes of less than $500. To provide a mattress apiece to all these families is beyond the resources available for such a program. Funds for financing it must come from the Federal Surplus Commodities Corporation which gets 30 percent of the customs receipts for programs to increase the distribution and use of surplus farm programs. These monies are being used in many different ways in an effort to get price-depressing surpluses of various kinds into the hands of handicapped families. Only a part can go to one commodity.

A stamp plan to stimulate greater purchases of cotton goods is one way the FSCC is tackling the problem of mountainous supplies of unused cotton. Families getting public assistance in a few cities will soon be benefiting from this plan.

Now comes the new home mattress-making program, directed specifically to farm families with total incomes of less than $400 a year whether they receive relief or not. These families, in the counties where the program is in effect, have been invited by the Department of Agriculture to take part. The program is designed to supply each participating family with a 50-pound cotton mattress of good material and workmanship, large enough for a double bed.

Materials for mattresses—baled cotton and cotton ticking—are purchased on the open market by the FSCC. Since there is a shortage of cotton suitable for mattresses on the market, however, the cotton financed by the FSCC is traded for suitable cotton with the Commodity Credit Corporation, a Federal loan agency which lends money to cotton growers on cotton. Many loans were not repaid, and consequently the Commodity Credit Corporation is amply supplied with good mattress cotton.

Home mattress-making programs have already started in the South. In these programs, councils of farm wives take over the job of getting enough support for the program in a county to get it going. They scout up a place where mattresses can be made. They round up sewing machines for the mattress making. They organize mattress-making bees so everyone will have a good time at the same time the work is pushed through.

At least 120 eligible families in a county must apply for mattresses. Then the committee working on the mattress program submits an order for the necessary cotton and ticking through the local Agricultural Adjustment Administration Committee (which is elected by the farmers in the community who are cooperating in the farm programs). Whether or not a nonrelief family falls in the income class with a gross of less than $400 a year is determined by the AAA committee, since the committee already has this information for use in the operation of the farm program. Farm families getting Federal assistance are certified by the Farm Security Administration.

The AAA passes the application for cotton and ticking along to the FSCC which ships as much cotton and ticking (in units large enough to make 120 mattresses) as has been ordered.

Families may make their own mattresses, or, as is the case more often, a group of families may come together and make all their mattresses at one time in one grand mattress bee.

THE MOST CONVENIENT PLACE TO MAKE mattresses, it has been discovered, is a high-school gymnasium. The tiers of seats around the gym are admirably suited for fluffing the cotton. As the cotton is pulled out of the bales, the matted fiber is pulled apart by hand and laid out on the rows of seats. While the men and children fluff the cotton and lay it out, the women sit at sewing machines cutting and sewing the ticking, 10 yards of it for each mattress, following the instructions worked out by Extension workers.

After 24 hours of airing on the tiers of seats the cotton is ready to be gathered up and put in the ticking. The ticking, its side pieces sewed to the bottom, is stretched out on a table. Then the cotton is weighed out in 3- or 4-pound handfuls and is laid into the ticking in even layers. As each new layer of cotton is placed in the ticking, the women working on the mattress go over it carefully to see that the cotton is packed in evenly and to make sure there are no thin places. Before a new layer is added the cotton is batted lightly with a stick which fluffs it and makes the fibers knit together.

By the time the entire 50 pounds of cotton are piled up in layers the cotton has fluffed up into something that looks like an oblong snowdrift on the table.

Now the women begin to sew the cotton up inside the ticking. First they pull the ticking over the puffed cotton and pin it down. Then, stitching spirally with a heavy thread and a needle the size of sailmakers', wearing gloves to protect their hands, they begin on the last laps of their mattress making. Sometimes the men, working under the careful scrutiny of their wives, do the sewing here.

Once the ticking is sewed up, however, the men definitely get their turn. They are handed a yardstick or a broomstick, and while everyone gathers around to watch, they start beating the cotton.

In the next operation the men and women cooperate. While the women trace out the stitches to be taken, the men work with a heavy needle, stitching up the roll edge. Tufting begins at this stage, though in many counties tufting is dispensed with. Then the mattress is beaten soundly again on both sides. The job is done now, and the mattress is ready to go home. Mattresses and families are packed into cars or wagons, and off they go, waving good-bye to their neighbors.

"MAKE YOURSELF a mattress out of the cotton surplus" reads an invitation sent out recently to America's low income farm families by the Department of Agriculture. The Triple A furnishes administrative supervision, the FSCC furnishes the cotton and ticking, the Extension Service gives technical advice, and the farm families do the work.

Every day for 2 weeks after that the mattress is beaten at home, sunned and turned. Finally, unless a family decides to cut a corner earlier, the mattress is ceremoniously laid out on a bed. Extension workers estimate that these mattresses would sell for $20 or $25. The actual material cost of each of these mattresses is about 6 dollars, 10 cents per pound for the 50 pounds of cotton they contain, and about 10 cents per yard for each of the 10 yards of cotton ticking necessary to make a double mattress. While they don't conform exactly to careful specifications for store mattresses (the ticking, for example, is only 6-ounce ticking while mattress experts recommend a stronger 8-ounce ticking), the thorough hand labor that's put into them makes up for these deficiencies.

SKEPTICS MIGHT OBJECT THAT MATTRESS-making bees are okay, but what happens to the mattress industry when the town turns out to make its own mattresses? Actually the people in the bedding industry benefit from the program. First, the people who make their own mattresses are people who, in the main, can't afford to buy cotton mattresses or enough cotton mattresses. That means the mattress project should not cut into mattress sales. Furthermore, reports indicate that the mattress making increases mattress sales. All the people who aren't out making mattresses see the mattress furore, and they themselves become mattress conscious. In effect, the campaign constitutes an advertising program for mattresses in general.

The sleeping-on-the-surplus campaign, however, has a meaning that goes farther than the mattress materials it gives free or the advertising it is giving to bedding. It fires a shot right in the bullseye of a problem that's been worrying America worse than a bad conscience—how so-called surpluses of farm products can be got to people who have deficits of these same products. In the case of cotton, very often, farmers with warehouse receipts for cotton in their pockets can't afford the finished cotton products they need.

Both the food stamp plan and the cotton stamp plan go at this problem from one direction. And now the mattress program is here to indicate that still more progress is being made. Maybe the time is coming when stamp plans and mattress programs will have done their work so well that most everybody will be able to get a good night's sleep. That will be when an antidote has been found for what the President of the Federal Surplus Commodities Corporation has called the Black Plague of the Twentieth Century—underconsumption.

Conservation Question Box*

To save soil for tomorrow's consumers, to build the basis for a more prosperous agriculture, to lift the face of America . . . farmers and Government are pulling together in a program of conservation

WHAT ARE SOIL EROSION and soil depletion, and leaching?

Erosion is the gradual wearing away of the land surface by wind, water, and gravity. The earth, undisturbed by men, weathers, and ages in a process called *geologic erosion*. This is distinguished from accelerated or soil erosion which is induced by man. The rain washes the soil, the wind blows it, under the pressure of gravity it moves down hill. But while the top soil is weathered away in geologic erosion, the rock underneath is weathering and crumpling into dust, building up soil. When the top soil is blanketed with grass, held fast with the roots of trees, umbrellaed from the rain by forest leaves, topsoil wears away less rapidly than when wind and water are allowed to lash its face.

Soil erosion is the name given to the man-made speed-up of the wearing-away process. By tearing away the forest, grass, and root-woven clothing over the land, men expose the topsoil to the peeling of the wind, and to the shearing, cutting drive of the rain. When the soil is washed away from the land by rain the process is called *water erosion;* when it is blown away, the land loss is called *wind erosion*.

Nitrogen, a most important plant nutrient, in some of its forms dissolves readily in water. When the rain washes over the fields, the plant foods drain off with the water even when soil is not washed away. This dissolving out process, which saps the land of its strength, is known as *leaching*.

Soil depletion is the term farm experts use to describe the mining of plant nutrients from farm lands by farming. Unless these nutrients are returned to the soil, eventually a farm becomes as exhausted as a mined-out coal shaft.

Each year it is estimated 6,500,000 more tons of nitrogen are mined out of the nation's farm land than the amount that is returned to it. The net loss of phosphorus is some 2,000,000 tons. Similar quantities of calcium, potassium, and other chemicals essential to life are lost.

IS SOIL EXHAUSTION A PROBLEM ONLY IN THE UNITED STATES?

No, soil exhaustion is as old as agriculture. Parts of the Sahara Desert in Africa and of the Gobi Desert in Asia once were fertile lands where shepherds tended their flocks and farmers reaped harvests of grain. The Queen of Sheba's rich capital city was recently exhumed from hills of sand piled upon it by erosion. Similarly, more than 500 cities flourished once on the plains of Asia Minor where today an occasional traveler sees only windblown dry wastes.

DO WE HAVE A SOIL-EXHAUSTION PROBLEM PECULIAR TO THE UNITED STATES?

Yes, we do.

The land laws during the nineteenth century led families to settle on land which should never have been cultivated. Knowing less than is known today, the Government offered homesteads that were too small to be farmed efficiently. In the '80's a cynic commented that the Federal Government bet a family it couldn't live on a homestead for 4 years, and most often the Government won.

Grazing areas deteriorate unless they are managed in large units. Cutting range land up into small family parcels leads to overgrazing, and the eventual destruction of the topsoil.

Speculators in land took advantage of the land laws, and feeding on the people's eagerness to settle the West, they sometimes subdivided the land into too many small units, and sold land for farming purposes that should not have been farmed at all.

Speculation in land also led to the generally held belief that land was a source of quick wealth. But land bought for the purpose of getting rich quickly is usually overpriced, is generally overworked, and sometimes is rapidly abandoned.

Inheritance laws accented heavily the tendency of American farmers to till farms that were too small. As land passed on from generation to generation farms were divided up between children, often in a way that turned one good farm into two or three bad farms.

Farm tenancy is another factor which gives soil erosion in the United States a twist of its own. About 42 percent of American farmers are tenants, and a large part of the rented land is owned by absentee landlords. Leases between landlords and tenants in the past were not the kind which made it worthwhile for tenants to improve the land they rented. Landlords wanted immediate cash returns, and gave no credit to tenants who spent money and time for soil-building practices which did not begin to pay at once. Tenants who had no reason to believe they would continue to live on a farm longer than a couple of years did not see why they should work hard and deny themselves to build up land for the tenants who were to follow them. Soil conservation made its inroads between the divided interests of landlord and tenant.

---

* *This is the second of a series of four articles on soil conservation. The first appeared in the April 15, 1940, issue of CONSUMERS' GUIDE.*

Cash cropping, the method of farming by which farmers depend on raising and selling one crop for cash, forced farmers, in order to keep up their incomes, to work their land as hard as possible. Since they had to have cash to live, they could not forego an immediate cash return, in the hope of getting larger returns in the distant future. When hard-driving farming practices reduced crops, farmers were forced to push the tired land even harder to make ends meet.

When farm prices swing wildly up and down from year to year, farmers overwork their soil in good price years to recoup their bad years. In bad years they overwork their land just to keep up their necessary cash payments. Farm mortgages placed at high interest rates when land is overpriced, require regular cash payments, and put a constant pressure on farmers to extract every last cent from the soil they can get.

Clean tillage, that is the growing of row crops, is also a typical American farming practice. It arose because these crops were most immediately profitable in cash.

Timber slashing, not by farmers, but by lumber companies, laid waste great areas, and added to the harvest of flood and erosion.

For all these single factors, which together made up an American attitude toward the land, no one person, no one economic interest, no single group of people is responsible. Altogether it was an American frame of mind in a particular American era which was at fault (or perhaps not at fault, because it was this attitude which peopled the West). At any rate, today the attitude has changed. The soil is no longer a gold-bricked source of quick wealth. It is the trust this generation holds for the next.

Now that everyone is alive to the importance of soil conservation, what's being done about it?

People have become slowly aware of a national conservation policy over a number of years. President Grant, in 1875, sensed the defects of the homestead laws. During President Theodore Roosevelt's administration particular attention was paid to the conservation of timber and mineral resources. Over the years, as the returns came in from farmers on the land, gradually a positive national conservation policy has been shaping up.

Perhaps 1940 will be the year historians will select as one in which one era definitely ends and another begins. For the year 1940 the Secretary of Agriculture has announced that all the farm programs now being administered by the Department of Agriculture are to be coordinated to insure the most efficient possible conservation of soil, forests, and human beings.

"Land is still wearing out faster than we can restore it," the Secretary of Agriculture said, . . . "As a nation, we have not yet succeeded in holding our own in the conservation battle."

What are these new policies?

Before answering that, you ought to know what the Federal Government has been doing up to now. Then you will understand how the new policies differ from past practices, and why their inauguration is so decisive at this time.

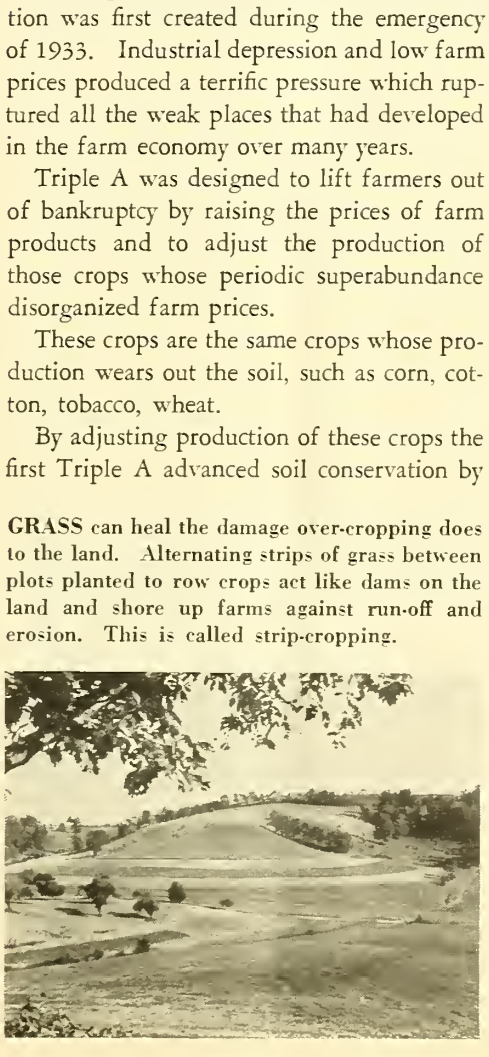
What federal agencies work in the field of soil conservation, what do they do, and what laws do they operate under?

The Agricultural Adjustment Administration was first created during the emergency of 1933. Industrial depression and low farm prices produced a terrific pressure which ruptured all the weak places that had developed in the farm economy over many years.

Triple A was designed to lift farmers out of bankruptcy by raising the prices of farm products and to adjust the production of those crops whose periodic superabundance disorganized farm prices.

These crops are the same crops whose production wears out the soil, such as corn, cotton, tobacco, wheat.

By adjusting production of these crops the first Triple A advanced soil conservation by making more land available for grasses and other soil-conserving crops.



GRASS can heal the damage over-cropping does to the land. Alternating strips of grass between plots planted to row crops act like dams on the land and shore up farms against run-off and erosion. This is called strip-cropping.

The Supreme Court decision in 1936 hastened the adoption of a national farm program based primarily on conservation. Congress in 1936 amended the Soil Conservation Act of 1935 to provide for the new approach, and this Act was strengthened in 1938 by the Agricultural Adjustment Act.

Bolstering farm income continues to be a major purpose of the Triple-A program. Devices for achieving this are: (1) Determining acreage allotments for soil-depleting crops, like wheat, corn, tobacco, cotton, and rice; (2) establishing marketing allotments when acreage adjustment proves insufficient; (3) lending money on crops and providing for the Ever Normal Granary; (4) making parity payments when farm prices, in relation to city prices, are too low; (5) steadying the seesaw in farm prices through marketing agreements.

Hoisted, now, to top-ranking position with other objectives of the Triple A is better and more far-reaching conservation of the soil. Farmers are not only shown how to conserve but are helped to put knowledge into practice through payments which can be earned by adopting or improving soil-building practices, such as rotating crops, diversifying farms, planting trees, terracing fields, contour ploughing, repairing gullies, building reservoirs, adopting approved fertilizing methods, sowing land withdrawn from soil-depleting crops to crops which rebuild the fertility of the soil.

How does the new conservation policy affect the triple A?

First, the schedule of payments farmers may earn for cooperating in soil conservation is changed so as to encourage them to redouble their efforts to save soil. The new policy does not reduce the amount a farmer may earn, but it changes the requirements for earning it.

Planting alfalfa in fields formerly used for growing corn, for instance, is a soil-enriching thing to do. Last year, a farmer who planted alfalfa could earn 2 credits toward a "performance payment." This year, he may earn not more than one credit for doing the same thing. The idea is that this farmer, in order to earn the extra credit, will plant additional alfalfa or give his soil some extra care, such as terracing.

Some farmers are already good practicing conservationists. Instead of rewarding them for doing what they might be able to do anyway without reward, payments are geared to induce them to improve their practices still further.

TERRACES spread their fingers out over the rolling earth to hold back rain water instead of letting it race off the land carrying valuable topsoil with it. The water remains for the crops, and the topsoil stays put. The gully shown below has been stopped in its tracks. Dams built across the wash stop further erosion, while hardy grass planted around the dams starts to work rebuilding the soil lost by gully erosion.

In short, conserving soil wins rewards both for the farmer who is a practicer of conservation and for the farmer who can be induced to begin. Practically no farm is so perfectly run now that there is no room for improvement.

These conservation payments require funds. Congress has appropriated funds to cover all types of payment under the farm programs. The new policy must stay within the limits of these funds. But to make the tug toward better farming practices stronger, the proportion of funds available for soil-building practices has been increased somewhat.

Another important feature of the new policy is its encouragement to small farmers. Conservation policies are hardest to carry out on small farms where farmers have less money to work with and a smaller area in which to work. The new program guarantees a minimum payment which may be earned for approved practices no matter how small the farm.

Under the Triple A, farmers themselves administer the program through their elected committees. Within the limits, top and bottom, on payments and practices, these committees decide which practices shall be rewarded in their counties, and they are the judges as to whether Farmer Brown has earned any payments. These committees check carefully on Farmer Brown's performance before they certify him to receive his Government check.

New policies, such as these, will mean a more fertile America, but they could not have been put into practice without a preliminary period in which farmers learned by experience the necessity for saving soil. Even now, intensive educational campaigns are being conducted to help farmers see that it's smart to conserve.

WE MUST WATCH OUT LEST CONSERVATION of our physical resources be pushed with full regard for the loss of dollars flowing off and down our streams, but no primary regard for wasted humanity. It is selfishness that has destroyed our natural resources, and to plead for conservation merely to stop the loss of dollars is to appeal to the same selfishness that wrought the destruction.

"It is only when human beings become the primary objective that conservation becomes the highest national virtue. Conservation can never become our master plan except as a nation's restitution for a great wrong done—not only to land, but to people."—*Henry A. Wallace, Secretary of Agriculture.*

Guaranteed to Perform as Labeled

Rules on labeling of agricultural and vegetable seeds help consumers to know what they may expect from their purchases

IN A BASEMENT corner of the Department of Agriculture, out of sight of the passerby, there is a room that appears to be a bakery in miniature. Tiny ovens line one wall. If you placed your hand on the oven doors, you would find that some of them are warm. Pull out one of them, and you will see—not bread—but green and white heads poking out of a magic soil formed of paper toweling or blotting paper.

You ask an attendant what it's all about. He tells you he is germinating some seeds to find out how many in a given quantity will actually grow into normal sprouts. Again you ask why, and you're told that every batch of seeds that comes into the country must measure up to a legal standard of performance and every batch of seeds sold across State lines must measure up to the standard of performance indicated on the label.

If you are the kind of consumer who wonders why the goods you buy are not labeled with a guarantee that they will perform as labeled, you may ponder on the great good fortune of farmers who buy seeds.

Here is a product for which minimum standards of performance have been defined. Here is a product (when sold in interstate commerce or coming from abroad) which is required by law to be labeled so the purchaser will know whether the product measures up to, or falls shy of, these standards. Here is a product for which standard methods of testing have been evolved, methods which are recognized alike by the trade and by Government as scientific. Finally, this is a product which, if misbranded will be seized by the Government and its distributor will be penalized.

Back of all this is a law. In 1912, Congress passed a law requiring that seeds be properly labeled. That statute had its loopholes. But last year, Congress passed a new seed law closing up the holes and providing the buyers of seeds with much greater protection. Now the buying of seeds can be done with discrimination and knowledge by anyone who takes the trouble to study the label.

Objectives of the law are few and simple.

First, the law applies only to vegetable seeds and to "agricultural" seeds—such as field crops like cotton and alfalfa, grasses, oats, and wheat. Lawn seeds, which city consumers buy, are considered "agricultural seeds." Excluded from provisions of the act are flower and tree seeds.

The act divides all seeds purchased into 2 classes. There are specific provisions for seeds as they are imported into the country. And there are other rules for seeds either imported or produced domestically which cross State lines before they are purchased by the ultimate consumer.

For seeds that come from abroad, both agricultural and vegetable, definite standards of quality and of performance are established, and no imported seeds may be released for sale unless they meet these standards.

Standards of quality and performance require that imported seeds contain a certain percentage that will sprout. Every time a shipment reaches an American customs office, samples are rushed to the Department of Agriculture in Washington where the quality of the seed is checked. If found to be below standard—as has many times happened—the seeds either go out of the country or they are processed to improve the quality.

No more than 2 percent of weed seeds are allowed, while only 4½ to 45 seeds of so-called "noxious" weeds (which are almost impossible to eradicate once they get a hold in the soil) can be included in a pound of imported seeds. The number depends on the kind of weed.

In addition, there are rules requiring the staining of certain seeds. Reason for this is to indicate to the buyer where the seeds came from, so that he can tell if the climate and soil of the country of origin match the conditions on his farm.

So much for imported seeds. As to seeds—domestic or imported—shipped across State lines, the law defines standards of performance for vegetable seeds but not for agricultural seeds. It permits substandard vegetable seeds to be sold provided they are labeled properly. It lays down rigid labeling requirements for both agricultural and vegetable seeds.

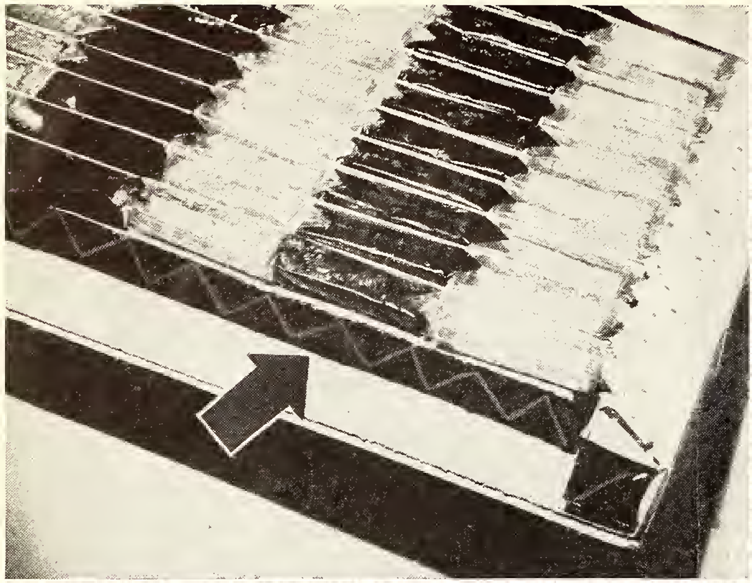
Agricultural seeds must show on their labels these facts: The percentage of seeds guaranteed to have healthy sprouts; the percentage of all types of seeds in any mixture, and also the percentage of "inert matter" and weeds; the name and address of the shipper or his code number assigned by the Department of Agriculture; the number of "noxious" seeds; the kind, type, or variety of seed; the origin of some kinds of seed; and the date of the germination test—or the test which guarantees the percentage of seeds that will grow—that is made by the producer or shipper. This last point is important. Under the law, seeds that go across State lines more than 6 months after they have been tested can be seized.

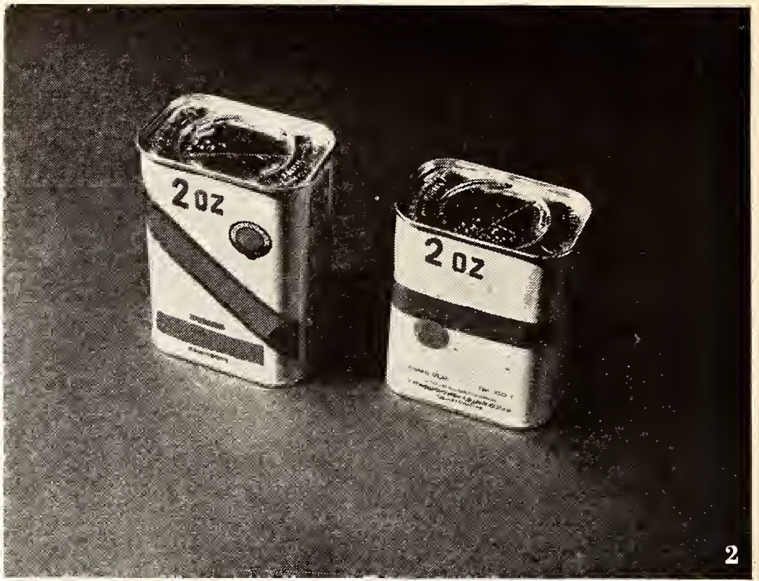
Label provisions for agricultural seeds went into effect February 5 of this year. Those for vegetable seeds will become effective in August. At that time, all vegetable seeds will have to meet a standard of performance or else be labeled—in big, easy-to-read type—"Below Standard." The performance standards are the percentage of seeds in one shipment guaranteed to germinate. Seeds meeting the standard have to be labeled only with the kind and variety of seed, and the name of the shipper or the person to whom the seeds are consigned. Seeds falling below the standard

[*Concluded on page 15*]

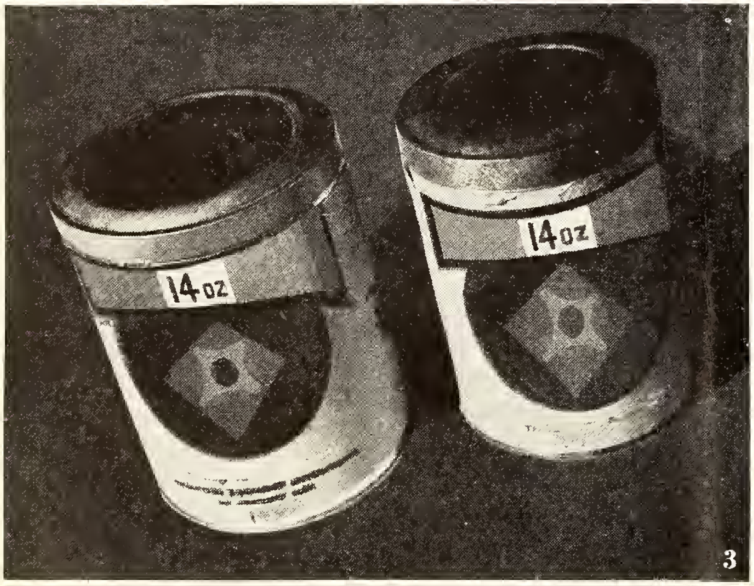
IN HOTHOUSE OVENS like these, Government scientists determine the performance standards of seeds.

Containers: Before and After

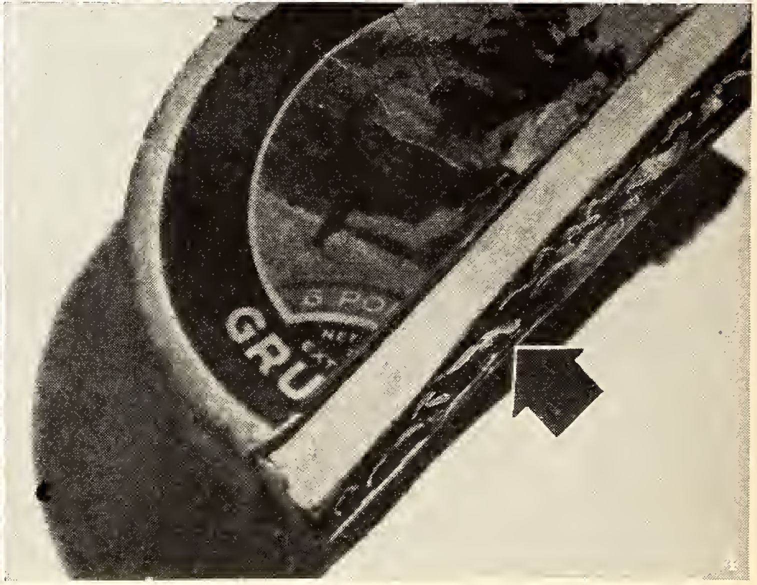


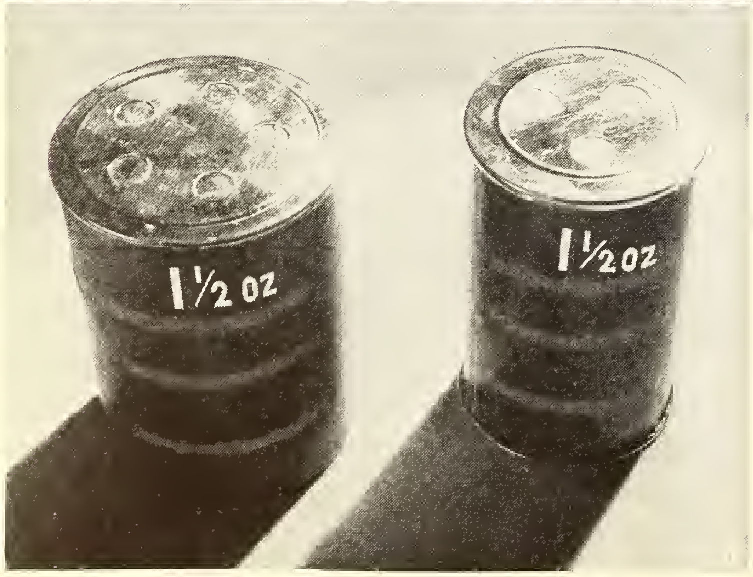


2

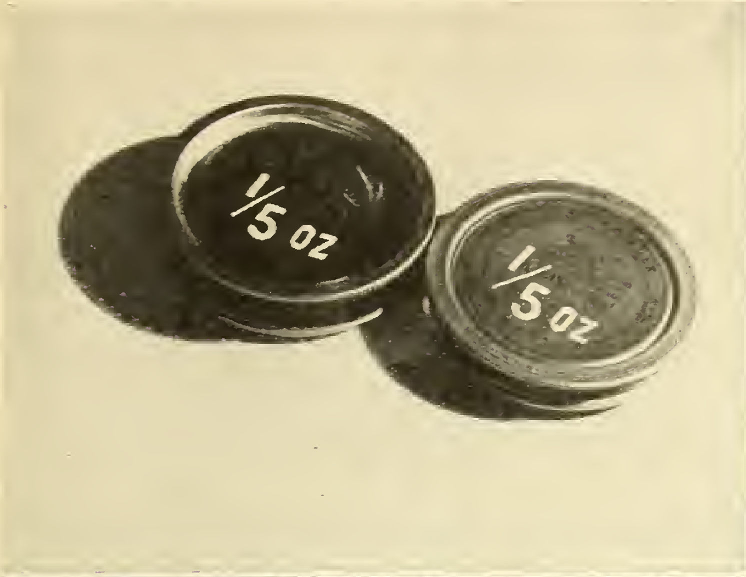


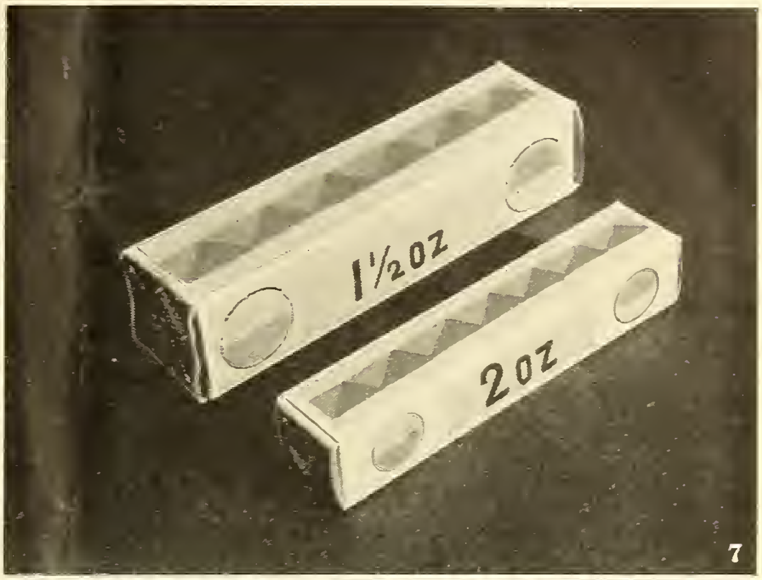
3



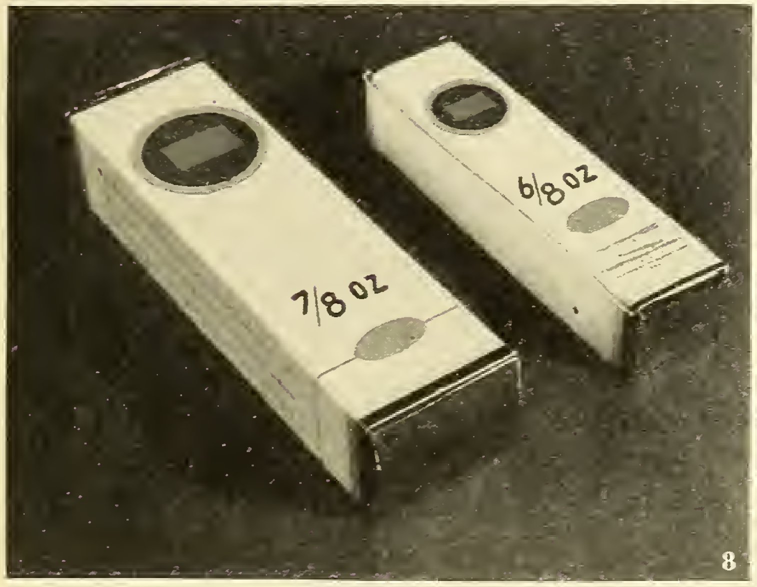


PICTURES TELL THE STORY. (1) This fancy candy box had an air space underneath the candy that was deeper than the layer of candy and gave the impression that the box held much more than it did. False bottoms, like this, are out. (2) Nutmeg was formerly packed in the box to the left which measured 11 cubic inches; the same amount of nutmeg now comes in the box to the right, measuring 9.3 inches. (3) Coffee, packed in the left-hand can, measuring 78 cubic inches, now comes packed in the right-hand can, measuring 63.5 cubic inches. (4) Here is another type of false bottom, now banned, formerly used in packaging cheese. (5) This grated cheese container has been cut down from 13.9 to 10.6 cubic inches. (6) Powder boxes, with thin layers of *a law—one of the most important to consumers—made possible these pictures which show how deception is being banished from many food, drug, and cosmetic containers*

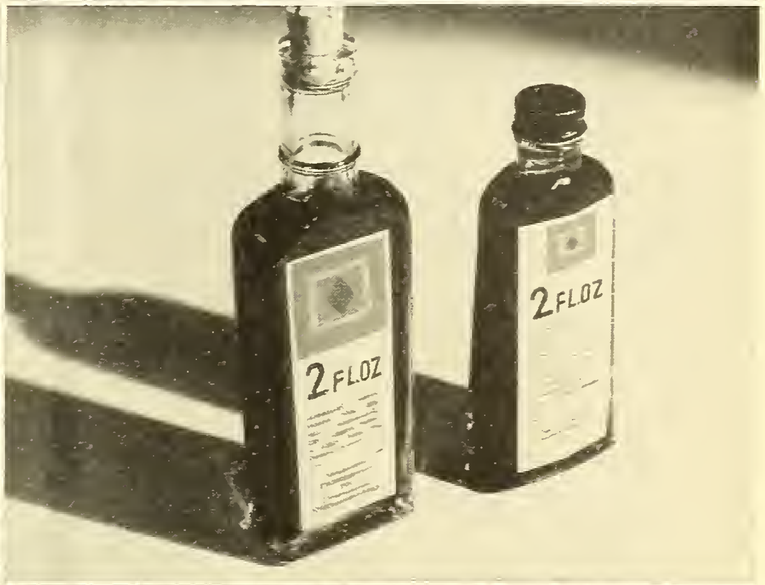


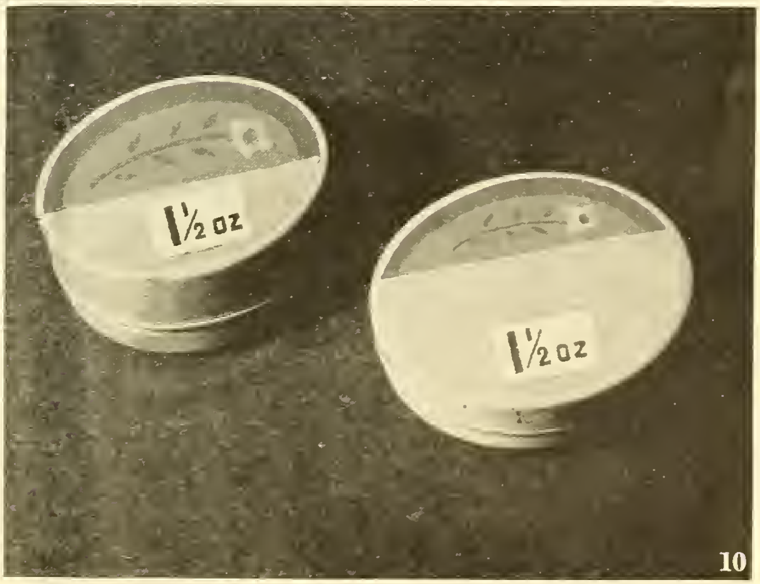


7



8





10

face powder, used to be deeply indented in the bottom; now deep indentations are out because they are deceptive. (7) One and one-half ounces of toothpaste used to come in the larger carton, measuring 13.5 cubic inches: now you can buy 2 ounces of the same toothpaste in a carton measuring 5.2 cubic inches. (8) Seven-eighths of an ounce of deodorant came in the carton to the left measuring 9 cubic inches; six-eighths of an ounce now comes in a carton measuring 3.9 cubic inches. (9) The redesigned patent medicine bottle (right) does away with the illusion of greater capacity given by a long-necked bottle (left) made of thick glass and capped with an over-long cork. (10) This ointment tin (left) measured 5.5 cubic inches before; now, 3.2 cubic inches.

Lard's Place in the Larder

Lard goes on the bargain counter as mountainous supplies bring down the price of this valuable fuel food

DIETITIANS call the food fats sources of energy. That makes plain the fact that fat in the diet doesn't build up tissues the way proteins do, and doesn't help to regulate the intricate apparatus inside the body the way vitamins do. Fat is to the body what coal is to the furnace. It furnishes heat. When the heat locked up in fat is not burned in the body, it is stored in fatty tissue the way coal is stored in a bin to await burning. One pound of pure fat, with its 4,080 calories, is a far richer fuel than any other kind of food.

Food fats for the most part are not solely fat. Butter, besides containing fat, contains some very useful vitamins and other constituents which give it its characteristic flavor.

For this reason all good fats are not completely interchangeable. As a source of fuel, however, they are interchangeable with slight adjustments in amount.

Lard, which does not have the vitamin virtues of butter, for example, is more than butter's equal in energy value. It also is richer in essential nutrients called fatty acids. Like butter, it is approximately 97 percent digestible. Fats are digested more slowly than other foods and fat-containing foods are also digested more slowly. Thus when these foods are eaten they give a sense of satiety, a feeling of fullness, while the sense of having eaten lasts longer.

For these reasons, lard is useful in low-cost diets. According to the Bureau of Home Economics, "A large amount of lard and other inexpensive fats in low-cost diets brings up the calories cheaply, and allows baking and frying to increase the palatability of meals." Lard, being entirely fat, with no added air or water, also goes farther than some other cooking fats. A cup less 2 tablespoons of lard is the cooking equivalent of a cup of butter or oleomargarine.

Lards differ, depending on the food eaten by the hog from which the lard comes, the part of the body from which the fats are taken, how the melted lard is rendered, and how it is cooled. Each of these factors is important in the quality of lard you get, but seldom do labels on lard containers give you information about them.

Diet of the hog affects lard quality. Lard made from the fats of peanut-fed hogs tends to be softer than lards made from the fats of corn-fed hogs. The importance of softness, or hardness, in lard is just this: Soft lards are oily and hard to distribute and combine in a batter. If you want to cream a lard in making a cake, for instance, you want a solid fat, because that creams better. If you want a lard for deep fat frying, a soft lard will serve your purposes just as well.

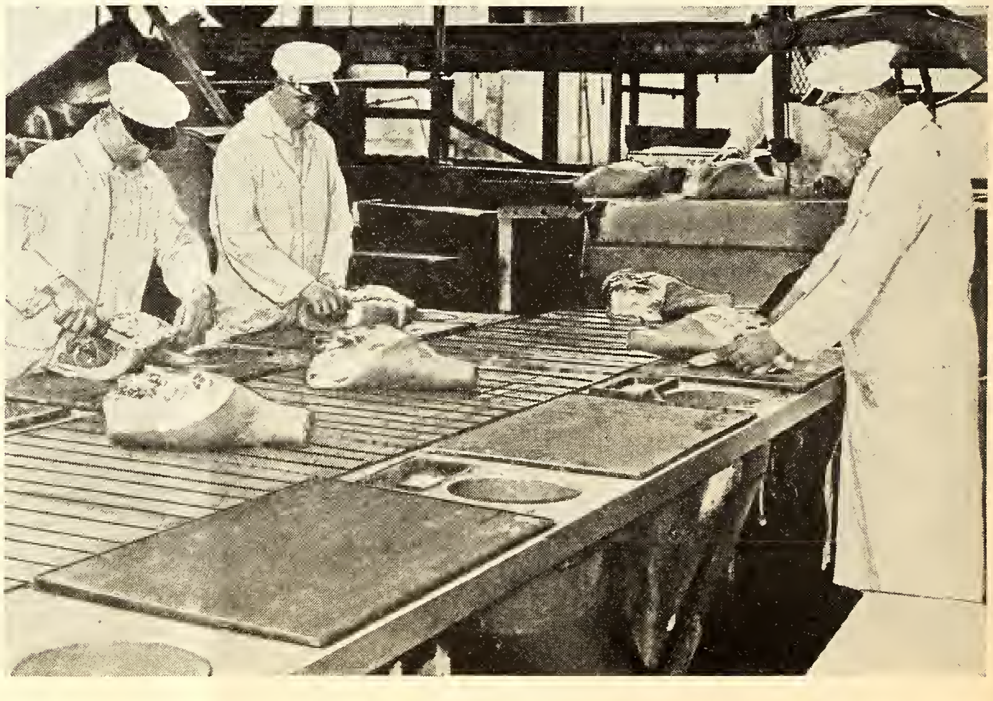
Where the fats come from also affects the quality of lard. Fats from the inside of the hog are somewhat harder than external fats. Again, internal fats have a higher melting temperature, and tend both to cream better and keep better than do external fats. "Leaf lard" is made from a layer of fat which is taken from the abdomen, close to the kidneys.

A third point of distinction between lards is the way they are rendered. Some are rendered in a closed, or partially closed container; others are rendered in an open kettle or by a dry melting process. Most of the lards consumers purchase are rendered in closed or partially closed containers. The basic difference between them and the open kettle rendered or dry rendered lards is that the latter have a nuttier flavor. When lard rendered by the former method is not of high quality, it has a low smoking point, which means that it is not suitable for deep fat frying. Also when it is kept over long periods of time, it is more likely to turn rancid than other types. For this reason, it should not be purchased in quantities you can't use up in a reasonable time.

Fourth major distinction in lard grows out of the way hog fats are solidified, after being rendered and permitted to settle. They may be solidified slowly, or suddenly by flowing over a refrigerated roller. When lard is permitted to cool slowly, the fats which harden at room temperature solidify first; those that solidify more slowly remain liquid on top of the hardened fat. This lard is known as "grainy" lard. When liquid lard is drained out of the settling tanks onto a refrigerated roller, however, it is chilled at once into a creamy white consistent mass. This quickly chilled lard, which hardens uniformly, is known as smooth lard.

Bakers and housewives who like to work with a soft fat prefer grainy lard, while housewives and bakers who prefer the creamier consistency of a solid fat ask for a smooth lard.

ALL LARD that enters interstate commerce is made under the direct supervision of a Federal Meat Inspector. Here fats are being trimmed from pork cuts for use in lard making.



Liquid lard must be packaged in a container of firm material. When packers prepare grainy lard for shipment, therefore, they never put it up in cartons. They run it out of rendering tanks into tubs or buckets.

As you see them in grocery stores, lards are usually described in the following terms:

Steam rendered lard: Rendered in a closed tank under steam pressure. Refined steam rendered lard makes up the bulk of the lard on the retail market.

Dry rendered lard: Rendered in a closed or partially closed container without steam.

Drip rendered lard: Rendered in a closed cooker so constructed that the lard is separated from the cracklings by dripping into a lower compartment.

Kettle rendered lard: Rendered in an open kettle. (When rendered exclusively from leaf fat, it is called *kettle rendered leaf lard.*)

Hydrogenated lard is in a class by itself. It is usually steam rendered lard to which extra hydrogen atoms have been added. These extra hydrogen atoms produce a bland lard which has a higher smoking point than ordinary lard, that is whiter and which keeps long periods without becoming rancid. Hydrogenated lard, like the familiar hydrogenated vegetable shortenings, is solid at room temperature.

It helps to remember the different kinds of lards if you think of their relative cost and what they're good for, at the same time.

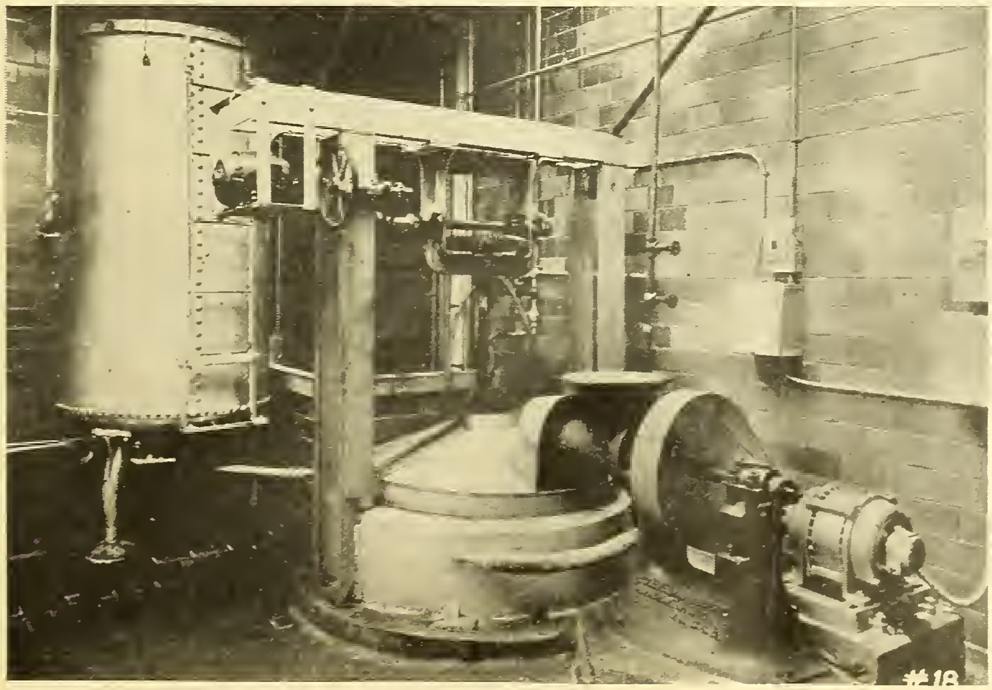
Lard is used for deep-fat frying, pan frying, and shortening.

For deep-fat frying you want a lard that has a high smoking point. For pan frying, you don't have to worry about smoking point; instead, you think about flavor. For shortening, you want a bland plastic fat that can be creamed.

Every time a fat is heated up, its smoking point is lowered. Consequently, a fat that has a low smoking point to begin with will be unsatisfactory where repeated use is necessary. Butter, olive oil, and lower grade lards which have low smoking points are not suitable for deep-fat frying. Good quality lard, however, turns out crisp french-fried potatoes and crunchy doughnuts.

Cooks who measure quantities with a cocked head and a squint used to tell when the fat for deep-fat frying was hot enough by watching for it to smoke. Today home economists urge housewives to avoid hit-and-miss methods that miss as often as they hit, and to use a thermometer. When the fat temperature reaches 350 to 360 degrees, it's time to fry. For lack of a thermometer there is another method—that is to drop a cube of crustless bread into the hot fat. If it takes more than a minute to brown, the temperature is less than 350 degrees; if it browns in a minute the heat is somewhere between 350 and 360 degrees, and if it browns in 40 seconds the temperature is soaring up around 370 degrees.

THE HOG FATS are dumped into a hasher which minces them and (for steam-rendered lard) ejects them into a closed vat where the fats are melted into lard by steam under pressure.



LARD

To avoid overheating the hot liquid fat, a straight-sided deep kettle is recommended. Usually, too, the smaller the diameter of the kettle the less chance there is of burning the fat. The kettle should never be filled more than two-thirds full, and under no circumstances should the fat be heated until it smokes. There is no danger from splattering if foods are wiped dry before they are dropped in the hot fat.

After all the potatoes or doughnuts or whatever it is that has been swimming in the fat, have been sieved out, the fat should be permitted to cool. Then a couple of slices of raw potato should be dropped into the cold fat, the fire should be turned on and the pan permitted to heat up slowly until the potatoes are brown. After that the fat should be strained through a couple of thicknesses of cheesecloth into a can, and then when cool, the can should be covered tightly and placed in the refrigerator.

Choice of a fat for pan frying depends upon the flavor you want in the food. Ordinarily food is pan fried at low temperatures so that a housewife has her choice of lard, butter, olive oil, vegetable shortenings, or drippings. Skillet wielders here, too, should steer clear of smoke and keep the temperature of the pan down.

Shortening in the dictionary is described as fat used in baking to make pastry and cakes tender. The attribute in fat which enables it to make a cake short is its tendency to form a film of oil over the tiny particles composing the batter or dough. These oil films, like all oil films, don't get wet and don't mix with water. By separating the particles of dough into water-tight globules, the fat prevents the flour from mixing with water and forming a sticky, elastic, gummy product.

Final texture of a cake or pie depends upon what kind and how much shortening is used or how it is distributed. If it is distributed in layers, you get a flaky product like a pie crust. If it is evenly distributed throughout the dough you get a fine tender texture as in a butter cake.

A good shortening for cake must also cream well. When it is mixed with the other ingredients of the dough, it must hold in air bubbles and thus permit the dough to increase in volume and to acquire a smooth even texture.

MOST COOKS USED TO FEEL THAT LARD WAS all right for bread and for spiced cookies, but when it came to cakes they steered clear of it. Lard, they said, gave cakes a strong taste and didn't cream well.

Recently, however, home economists and food chemists got to work with their test tubes and ovens in the laboratories of several midwestern universities to see if they could find out how lard might be used with good effect in cakes.

In the Iowa State College of Agriculture, workers discovered, for example, that by departing from traditional cake-mixing methods, excellent results could be obtained. One method consists in creaming the lard and one-half the sugar. Next add the flour and milk. Then beat the other half of the sugar into the egg until it is very light and fluffy. Quickly add this sugar-egg mixture to the cake batter.

Lard keeps well (hydrogenated lard best, kettle-rendered lard next best, and steam-rendered lard next) but like all fats it eventually becomes rancid. Rancidity, which comes from the splitting off of fatty acids, is hastened by moisture, air, light, or high temperatures. Lard, therefore, should be covered tightly and kept in a cool place. Since fats absorb tastes and odors readily, keeping lard covered also serves to retain the original bland lard flavor. While hydrogenated lard keeps well at room temperature, it, too, should be kept covered, like the vegetable shortenings.

TWO FEDERAL LAWS HAVE COME TO THE rescue of consumers who want assurance that the lard they buy is clean and wholesome. These are the Meat Inspection and Food, Drug, and Cosmetic Acts.

From the time it enters a slaughter house as the fat on a live hog until it finally leaves the processing plant, lard which is to be sold across State lines is subject to the supervision of the Federal meat inspection service. Ingredients which go into the lard are inspected, and the method of processing is supervised. Labels on federally inspected lard carry this legend: "U. S. Inspected and

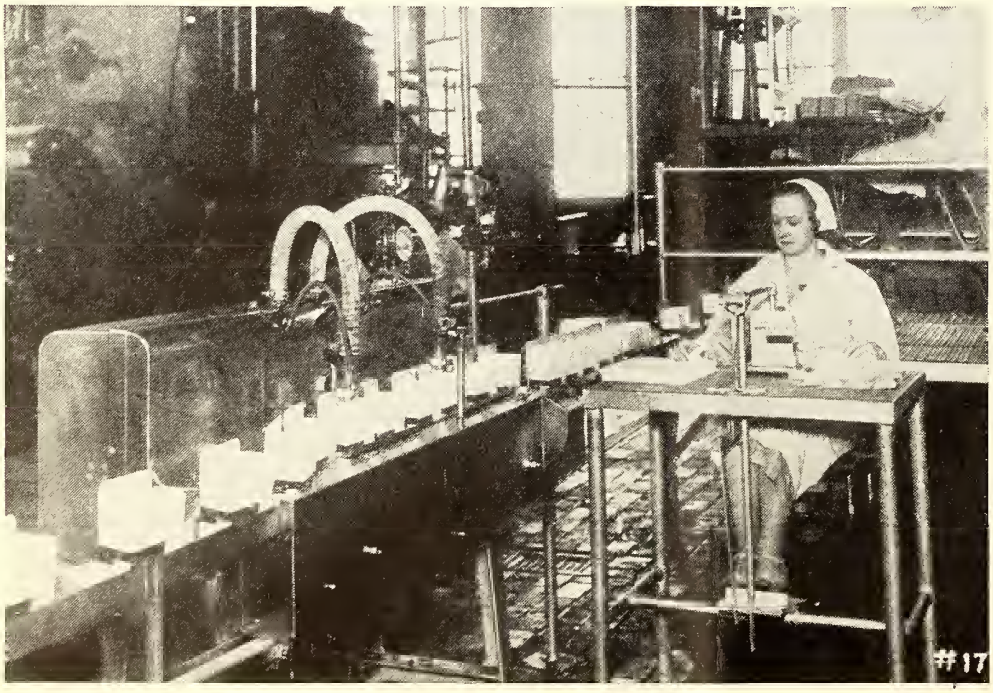
LARD these days claims more than its share of the headlines. While shortages of fats and oils in national diets haunt the days and nights of governmental economists abroad, in the United States the quantities of lard in cold storage have risen to stratospheric heights. On March 1, 1940, for example, the amount of lard in storage set an all-time American record when it reached 258 million pounds, that is about one-sixth of the lard produced in the country during a year.

In recent years the average American has been getting about 11 pounds of lard a year in his food. What was left over was exported. During the 1920's lard exports were over a billion pounds a year, more than half of the total American production. International trade barriers and the depression pushed this figure down, and then the drought years so cut down on American lard supplies that there was little to export. Corn production came back, however, and that shot hog production up, and that set lard production skyrocketing, and put America in a position to make up the fat shortages abroad with its exports. But then the war erected the highest trade barrier yet, piling up huge stocks of lard in American cold storage warehouses. The result is low prices and hardship for the farmers who raise corn and hogs.

Determined to snatch some advantages out of this tierce of lard troubles, the Federal Surplus Commodities Corporation announced early this year that pork products, including lard, could be purchased with blue stamps. This enables needy families in cities where the blue stamp plan is operating to take the blue stamps they get free from the FSCC to their grocery stores and to buy pork and pork products, including lard, with them. To supply lard to needy families in areas where the blue stamp plan is not operating, the FSCC also purchased 34,740,620 pounds of lard in the 4-month period following December 15, 1939, for distribution through relief agencies.

When lard goes on the blue stamp list, that should light up a meaningful flare for consumers lucky enough not to need blue stamps when they are shopping. Lard is on the blue stamp list because its price is down, and smart consumers don't ignore a good food when it lands on the bargain counter.

THE RENDERED LARD is drained into settling tanks, passed through refining presses, cooled, and then squirted into packages. When the lard is permitted to cool slowly, grainy lard results; when it is quick cooled, the final product is smooth lard.



Passed by the United States Department of Agriculture."

Like any food, lard can deteriorate if not handled carefully after it leaves the factory. Under the Food, Drug, and Cosmetic Act, lard that has deteriorated is subject to seizure if it has crossed State lines.

Protecting consumers from poor quality products is a second line of defense for pocketbooks. Here Congress holds out another hand. It has given the Secretary of Agriculture power to define standards of identity and minimum standards of quality. When a standard of quality is established, a food which falls below this standard must be labeled substandard. When a standard of identity is set, a food which fails to meet this standard may not be called by that name. Such standards have been worked out for a few foods. Right now the Federal Government and State government experts are at work examining the possibility of defining a standard of identity for lard.

Between bottom and top quality lard there is a wide spread, as all good shoppers know. No law now requires that labels tell consumers what is the quality grade of the product. The Agricultural Marketing Service in the Department of Agriculture has the power to define quality grades for voluntary use by buyers and sellers of farm products. But the development of such standards is not an overnight job.

GUARANTEED TO PERFORM AS LABELED

[*Concluded from page 9*]

can still cross State lines but must be labeled "Below Standard," and must show the percentage guaranteed to germinate, and the date of the germination test.

Checking the label guarantees of both domestic agricultural and vegetable seeds is done by the Agricultural Marketing Service much the same way the Food and Drug Administration checks on adulterated or misbranded foods, drugs, and cosmetics. Stiff penalties are provided by the Act for shippers who misbrand their products. The Federal germination test is final in all cases where results fail to agree with the test made by the shipper.

False or misleading advertising of all seeds, domestic or foreign, is barred under the act. That means false or misleading statements in newspapers, magazines, catalogs, over the radio, and in any printed matter.

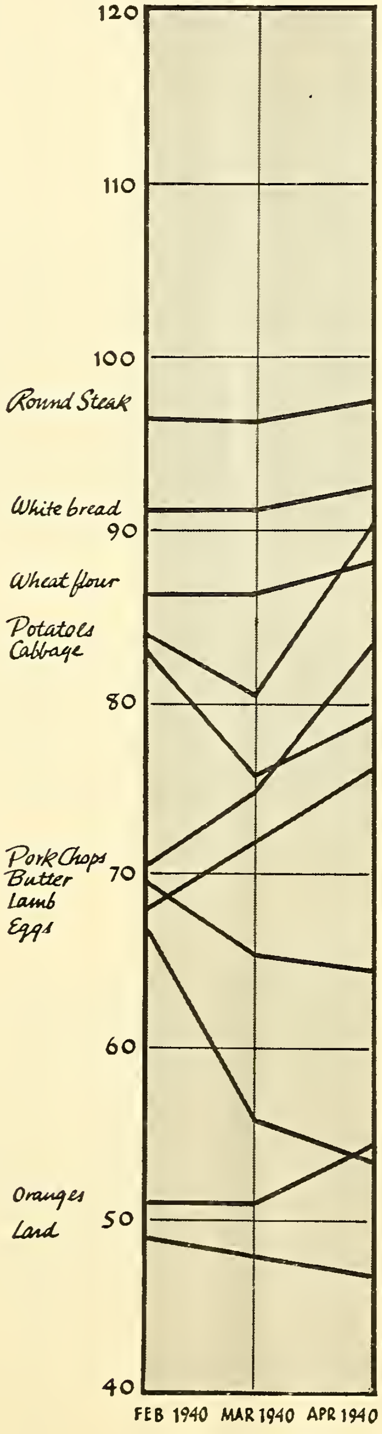
YOUR FOOD COSTS

FOOD COSTS. Retail food costs, which have been moving up and down in seesaw fashion during recent months, jumped up again from March to April. This increase more than canceled the decrease which occurred during the previous month. Even though costs in April were the highest they've been this year, they were low when compared with April levels in recent years. In 5 of the 6 past years, food costs in April have been higher than they were this year.

Advancing prices for fruits and vegetables, particularly potatoes and onions, were the major factor behind the upswing from March to April. But slightly higher prices for beef, lamb, fresh pork, and bread also served to offset price decreases in other food groups. Price drops in most cases were relatively small except in the case of eggs.

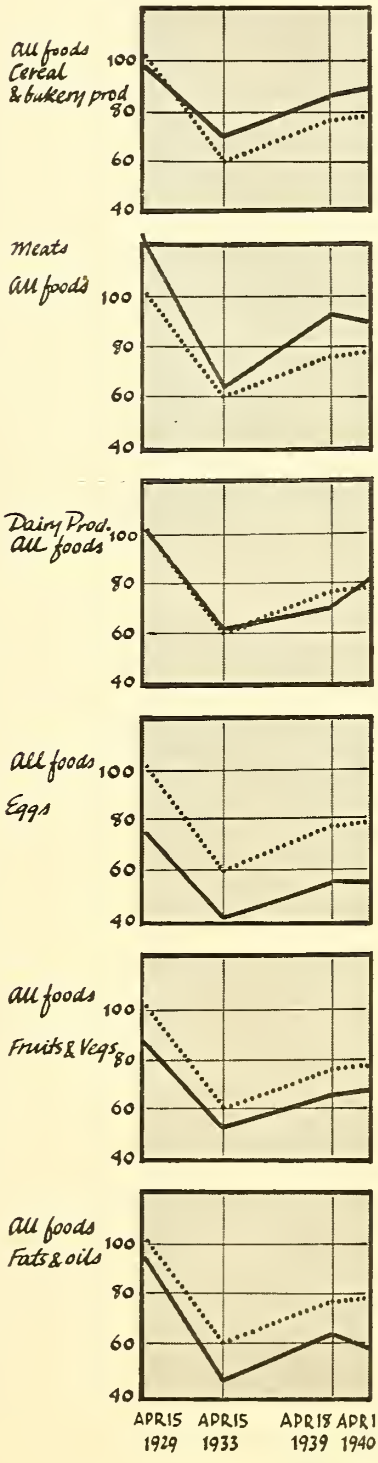
A PERSPECTIVE

(1923-25=100)



A CLOSE-UP

(1923-25=100)



IN THIS ISSUE

MAY 1, 1940 ● VOLUME VI, NUMBER 15

Sleeping on the Cotton Surplus 3
Conservation Question Box 6
Guaranteed to Perform as Labeled . . 9
Containers: Before and After 10
Lard's Place in the Larder 12
Your Food Costs 15

U. S. GOVERNMENT PRINTING OFFICE 231630

5

LIBRARY
RECEIVED
JAN 8 - 1945
U. S. DEPT. OF AGRICULTURE

CONSUMERS' GUIDE

MAY 15, 1940

MATTRESSES

GUARDING FOODS

BOOKSHELF

CONSERVATION

CONSUMERS' GUIDE

MAY 15, 1940 VOLUME VI, NUMBER 16
A Publication of the
Department of Agriculture
Washington, D. C.
Issued monthly from June through
September; Semi-monthly from
October through May
Prepared by
Consumers' Counsel Division
D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.

AMERICA'S MAKEUP is the subject of 30 court decisions recently made public by the Food and Drug Administration. These decisions are the final results of the first court actions taken by the Food and Drug Administration under the cosmetic section of the Food, Drug and Cosmetic Act of 1938.

Cosmetic case No. 1 pitted the United States Government against 23 boxes of eyelash and eyebrow dyes. Involved in the same proceeding were quantities of the same eyelash and eyebrow dye taken in 33 other seizures. The dyes contained, according to the court action, "a poisonous or deleterious substance — paraphenylenediamine — which might have rendered it injurious to users under the conditions of use prescribed in its labeling. . . ." Even the manufacturer of the dye had an intimation that the dye was dangerous, for in the packages of the dye which were sold to beauty operators for application to their patrons, he enclosed a waiver. "For the Protection of Beauty Operators," he advised, "have your patrons sign the enclosed waiver. Our records show that only one person in several thousand is susceptible to dye, but warning should be given."

At the trial involving the 23 boxes of dye the cosmetic manufacturer did not put in an appearance, so the court simply ordered all the seized dyes destroyed. The manufacturer was hailed before a court in cases involving the same dye, however, and here was fined $2,300. All except $250 of this fine was remitted.

The first 12 court cases of the Food and Drug Administration under the cosmetic section of the Food, Drug, and Cosmetic Act of 1938 had to do with eyebrow and eyelash dyes.

Hair dyes were the culprits in cosmetic cases 13, 14, and 15. They had the finger put on them because their labels did not warn consumers that they contained ingredients which might cause skin irritations.

More than 40,000 lipsticks took the stand in another case. They were accused of containing cadmium and selenium, two minerals which might be poisonous or deleterious to lipstickers. These lipsticks, which were imported, were not destroyed. Instead the court permitted the importer to salvage the containers and to ship the lipsticks back where they came from in one huge mass of lipstick.

◆

CREAMS AND LOTIONS WERE DEFENDANTS in 6 cases. All of them got in trouble because they were dangerous. One promised to remove freckles and tan; the second promised to get rid of moles; the third promised to eradicate externally caused pimples and superficial discoloration of the skin; the fourth was a bleaching cream; the fifth was a purported remedy for dandruff and eczema; while the sixth was offered as a treatment for pimples, tan, and freckles. All of them were ordered destroyed.

The last 8 of the Food and Drug Administration's first 30 court cases put cosmetics on trial for being packaged in deceptive containers. One guilty tube of tooth paste was found taking up only 30 percent of its cardboard container. It also bore a false and misleading statement in regard to its effect on gums. A second tooth paste, found inside a container three times too large, was similarly misbranded. In the remaining cases a brand of shaving and dental creams was packed in containers four times larger than necessary. A deodorant was stuck in a container which could have contained four times as much deodorant as it did contain. Another deodorant container was in a box three times too large. Of 3 face powders that strayed into court, 2 contained only one-third as much powder as they seemed to contain, while a third could easily have held an ounce more powder than it did hold.

Anybody who wants to know the names of these products, their shippers, manufacturers, or distributors can obtain them by asking the Food and Drug Administration, Washington, D. C., for a free copy of "Notices of Judgment," May 1940.

THIS IS FOR YOU!

From its earliest issues, the demand for the *Consumers' Guide* has periodically exceeded our ability to supply copies. Although we have attempted in every way to insure the widest possible distribution of this publication, there have been many times when we have had to refuse requests for copies because the number available has been exhausted.

Each year we ask the persons receiving the *Consumers' Guide* to renew their requests for copies, in this way dropping from the mailing list those to whom the publication is no longer of service. We are making the same request now.

The maximum authorized number of copies of each issue available for official distribution is 150,000. If you wish your name retained on this list, you must fill out and return the top half of the double postal card addressed to the United States Department of Agriculture, which you will soon receive. This must be done promptly *within 30 days.* At the end of that period, if we have failed to hear from you, your name will be dropped.

In addition to the official free distribution of the *Consumers' Guide,* copies are available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D. C. Individual copies are 5 cents per copy, with a discount of 25 percent for orders of 100 or more. Yearly subscription is 50 cents, domestic; 80 cents foreign. When making a purchase, send money order or cash, not stamps or personal checks.

If you are now on the official mailing list but would like to release your copy for someone else who is eligible to be placed on this list, you may use the form order on the bottom half of the double postal card going to you. This should be enclosed in an envelope with cash or money order and the envelope stamped and addressed to the Superintendent of Documents, Government Printing Office, Washington, D. C.

REMEMBER—you must mail the top half of the subscription card *within 30 days* if you wish your name retained on the official list. It may not be possible later to reinstate your name because of the limited number of official copies. Copies may be purchased, however, at all times, from the Superintendent of Documents, Washington, D. C.

Farm Security Administration has our thanks for the main cover photograph and those on pages 3, 4, and 5 of this issue.

A Cooperative Way Out of Want

Farm Security Administration helps 300,000 farm families explore what cooperative organization can do to make farming more profitable and living more tolerable

WALT THOMAS* is 45, his wife 41, his children still at home are 3, 7, and 10 years old. In 1921 Walt, who has been a farmer all his life, and his father before him, owned a small farm, raised cotton, got along. He had a horse, a cow, chickens, a plow, and other equipment needed for cotton farming. In the summer he farmed, in the winter he bought his food in town: Vegetables in cans, potatoes, flour, meal, sugar, coffee. He paid for them with the cash from his crop. Except when his wife took sick and ran up a doctor's bill he managed prettv well to break even.

Things changed. It's hard for Walt Thomas to recall just how it happened. It wasn't sudden so you could put your finger on it. It was just that he had to plant more and more cotton to get the same amount of cash at harvest time.

Finally he planted clear up to the house—hardly leaving room even for the little patch of summer vegetables.

"There wasn't anything else to do. People started talking about low farm prices. No matter how much you planted you couldn't make a small farm like mine pay. When you finished up at the end of the season, you couldn't believe you wouldn't have more cash. You still had to buy food and clothes till the next crop was ready. Funny part of it was you had to pay about the same as ever for your canned goods and such.

"I guess we could have pulled through all right if we hadn't had some trouble, but then it's hard to find a farmer that doesn't have sickness one time or other. Even when I had to put a mortgage on the place I didn't much worry. I was figuring like the rest that something would happen so we could get the old prices for our cotton.

"WELL, WHEN YOU HAVEN'T GOT ENOUGH to carry you through the winter you certainly haven't got enough to pay debts and big interest either, and you might as well kiss the old homestead good-bye. When you get to be a tenant, things are about the same except you have to pay your rent. You never do seem to get anything ahead. Plows wear out, horses and cows don't live forever. When they're gone you're about sunk, the way I look at it.

"All I got now are a few chickens and the scraps of furniture that still hold together. I've got debts to about $100 too, but there's no use worrying about them. The only reason I think about them at all is because I need to borrow more to buy seed and fertilizer, and a plow this spring, and there isn't a fellow from here to Birmingham who would loan me a plug nickel with that debt."

WHEN YOU START TO COUNT NOSES, YOU find that farmer Thomas has a good many friends and neighbors who can tell a story of much the same pattern. They have tried hard to make farming work the way it worked for Pa and Ma—the way it worked for them when they started out—and they end up behind the eight ball for a reason they can't fathom.

Farmer Thomas tried to think his way out of the spot he and his family were in and reached two conclusions. No. 1: If you can't make a living from your cash crop, you had better save what you can by planting a good patch to things you can eat. That means seeds. No. 2: You had better see what you can do to make your crop at the least possible expense. That means equipment. Seeds and equipment both require cash. Without cash you could plan your farming from here to Kingdom Come and end up with nothing more than some acres of weeds.

That's when Farmer Thomas went calling on the Farm Security Administration.

The Farm Security Administration was created to help farmers like Walt Thomas get back on their feet, and put them on the road to becoming permanently self-supporting. Rehabilitation is part of the job. Small grants are offered in emergency times—when drought or flood strikes. Farmers whose farms are counted by commercial credit sources as poor backing for a loan but whose will to work is counted by the FSA as excellent backing are given the chance to secure individual rehabilitation loans for feed, seed, fertilizer, sometimes livestock and equipment, to help carry out their plans for improved farming. Cooperatives are established through community and cooperative services loans.

Farmer Thomas' own private depression was not the result of drought so he didn't get a direct cash grant, but he did get an individual loan. The cash from this loan bought him feed, fertilizer, a horse, and a plow which he needed and would use entirely by himself. Without these he could

---

"Walt Thomas" is an imaginary personification of many thousands of farmers. He is no particular farmer.

not get anywhere with farming. The responsibility for meeting the interest payments was his alone

This individual loan was the starter for putting Walt Thomas back on his feet. It helped him carry on his one-crop farming as efficiently as he could. It enabled him to plant the vegetable patch which would cut down his cash outlay for food. But he realized as well as the FSA supervisor that it would not do a great deal to boost his cash income. Probably, when the mare became useless or died, he would have as hard a time finding the money for a new one as he had had before FSA granted the loan.

If he could breed his own stock he would be sure to have an animal to replace this mare when he needed it. Besides, he saw the prospect of new income from selling a colt each year.

There would not be much gain if he had to buy the breeding animal alone, but when he started to figure, he could count at least 9 neighbors who were in just about the same fix as he was. He knew they all would welcome any chance that was offered to build up their income. When they talked it over together, they decided to buy a registered jackass to breed with their mares. While stallions cost less to begin with, the mules which are bred by crossing a mare and a jackass are considered better work animals. They sell for from $25 to $75 as compared with a $50 top for colts.

Planning the purchase was just half the story. Like all FSA rehabilitation loans, this one had strings attached, strings to insure the money's wise investment, its contribution to better farming, to greater security. Joint loans like those granted Farmer Thomas and the others are made on condition that they shall be used for purchases made in fulfillment of the FSA farm plan drawn up between supervisor and farmers and that they shall supply farm or home facilities or equipment cooperatively. Though some FSA co-op loans are small enough to permit a farmer like Walt Thomas to borrow by himself, sometimes there is better reason for granting the loans to establish cooperatives. Walt Thomas' cooperative jack illustrates how much more economical it is for several farmers to join hands to secure a service. More important, cooperatives like this one set up with FSA loans do a lot more for their members than supply the equipment or facility which they could not get alone.

If Walt Thomas had not possessed a neighborly streak in his nature which made him think of nearby farmers in the same predicament, he might have tried to get what he needed for himself and struggle on alone. In that case he would have had ten times the financial burden to shoulder and one-tenth the brain power to do the job. Through the co-op which he and his neighbors set up with the FSA county supervisor, they secured a registered jack for $1,000. FSA loaned the money with the provision that it would be repaid in five years at the rate of $200 a year. The interest rate was set at 3 percent on the unpaid balance.

Dividing up this obligation among the 10 farmers meant that each farmer's share for the first year came to $23; for the second, $22.40; for the third, $21.80; for the fourth, $21.20, and for the fifth, $20.60. To meet these obligations they agreed to levy on themselves a servicing charge of $15. Outsiders who agreed to service their mares with the co-op's jack settled on this same charge. At the end of the year, they found their treasury held $300 which had been taken in as payment for servicing. When each member had withdrawn his $23 due FSA, there was still $70. Though they could have distributed this money equally among their members as a patronage dividend, they decided to leave it in the treasury. It would provide for feed, and start the fund which would buy a new jack when they needed it.

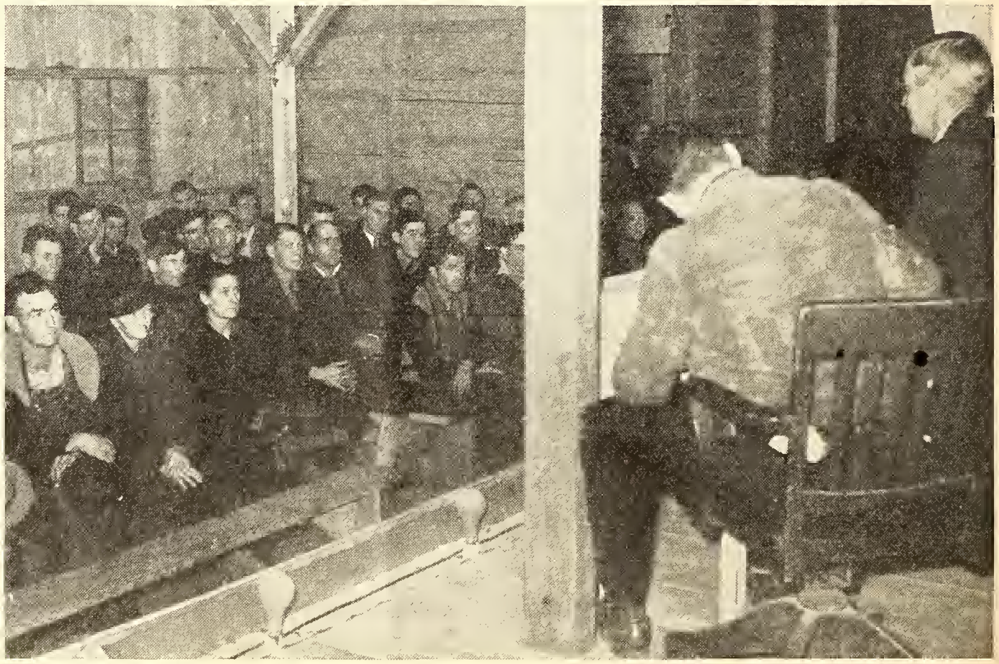
Among their gains from this FSA co-op they could already count their savings on the servicing of their mares, and the value of their ownership. They looked forward to the annual county fair and barbecue where there would be a market for their first mules, and an additional source of much needed cash.

Nonmember participants who were ineligible or uninterested in getting a loan for themselves, shared in the plans from the start. They agreed with the cooperators on the charge to be made for servicing and paid less than they would have to a private farmer. In most progressive cooperatives, provision is made for participants becoming actual cooperative members after FSA loans are paid off. Sometimes, the participant takes over the membership of a cooperator who moves away. In such cases, the service payments he has made are applied toward his membership in the co-op.

Cooperation is old stuff to many farmers lucky enough to have money to spend or large crops to sell. They have tried it in selling fruits and tobacco, nuts and other farm products They have tried it in purchasing goods for the family and materials for the farm; in buying insurance, and saving. Cooperation means going into business for yourselves. It means added income and stretched dollars for many farm families. Last year all farm cooperatives rang up a total of 2 billion dollars on their cash registers; 420 million dollars of this was in the cooperative purchasing of goods. Besides more for their dollars, cooperative members feel that active participation in the business helps insure their getting better quality.

FSA co-ops for small farmers differ from other co-ops in detail, not in theory. Through

FSA's 300,000 co-op members meet together like this group to carry on co-op business and to discuss plans for better farming approved by the FSA county supervisor.



FSA, co-op farmers pool their willingness to work as security for a loan. With the loan granted by FSA they purchase equipment which they use cooperatively. Repayment of the loan and payment of interest is divided among the members. Care of the equipment is a cooperative responsibility too.

For farmers whose battle with the soil is a tough one, the study and group discussion which are a part of cooperative enterprises bring adequate dividends in good measure. Members meet regularly to talk over their problems. At first, the talk goes slowly and wanders over the weather and family happenings. Gradually the members realize they are stirring up suggestions about better farming. Some one will remember, perhaps, meeting "some agricultural college boy once" who said that drilling seed gives you a whole lot more bushels an acre than just sowing it. Or maybe it's someone else who learns about a better fertilizer everybody might use. Experiences and "learnings" get passed around; ideas are swapped; plans are threshed out together.

BEFORE FSA came along, many of these farm families bought all their food. Now, with FSA help, they grow as much as 80 percent of what they eat. Another way they save is to can food for winter use in canning centers established with FSA co-op loans.

WALT THOMAS' FARMERS "TOOK" TO COOPeratives. So have 300 thousand other farm families who have received more than 15 thousand community and cooperative service loans granted by FSA. No one can count how much more income co-op-borrowing farmers have earned as a result of these loans. But borrowers of FSA's rehabilitation funds, selected from the same low income groups, have upped their net worth an average of 26 percent, their incomes 43 percent, in the year following the granting of loans. That means families who had on the average $375 to carry them through the year, made $538 after receiving loans averaging from $300 to $839 each.

Figures like those are not meaningless. When you realize farmers helped by FSA co-ops are getting along on $375 a year you get a good idea of how much the $9,000,000 worth of loans granted so far can contribute in terms of better living and greater security.

Most of the community and cooperative service loans so far have been granted to farmers in the south and south central States and FSA looks ahead to the time when, through good farm leadership, co-ops will be established throughout the southern Appalachian area where small farmers fare worst.

Best demonstration center, to show how varied are activities that can be transacted through FSA co-ops, is Box Elder County, Utah. Over half this small county's farm families are participating in some 200 co-ops established by FSA loans. Ranging from breeding co-ops to cooperatives for medical care, 22 different groups have been established to buy threshers, beet pullers, manure spreaders, and even to build a pumping plant, reservoir and irrigation system. So extensive are FSA co-ops that low income farmers with small holdings can point with pride to their share in trucks, trailers, potato planters, feed choppers, purebred stock and other farm animals and equipment usually owned only by "big business" farmers.

THE NUMBER OF FARMER COOPERATORS, the variety of functions co-ops perform, is proof No. 1 of low income farmers' adaptability to the cooperative way. Proof No. 2 that Box Elder families have learned their lesson on cooperatives well is a report to FSA on inner workings of the co-ops. Even the handful of farmers, who together, have purchased a sleek stallion, meet frequently to talk over joint and individual plans for making their stallion boost their farm incomes. Out of these meetings plans develop for further cooperative purchases. Sometimes several groups meet together to pool cooperative experiences. Progress has been so great that a general meeting of participants in all 208 services has been called. Subject of discussion: Possibilities of building more co-ops—specifically for purchasing farm and home supplies—and plans for joining large independent farm cooperatives.

From start to finish Box Elder County typifies what farmers can accomplish for themselves when FSA loans put a handle to the door of joint enterprise. A cooperative canning service set up in Tennessee at a cost of $40 netted its owners $67.50. Total value to cooperator and private participants included the 3,244 cans of fruit, meat, and vegetables canned for winter use. Before this canning service was started, the 28 hard pressed farmers dug into their pockets for store-bought canned goods, or went without when cash was not available.

Sire services of a Kentucky breeding co-op have been used 180 times in the 3 years of its existence. Costing $126, its owners count the $203.50 gross income derived, and the increased value of stock and dairy products resulting from better breeding, in computing the benefits of the service.

THOUGH FAILURES OF FSA CO-OPS ARE FEW, no organization is allowed to languish for lack of attention from FSA. When a co-op fails to make its payments on time, investigation begins. Trouble stems usually from one of these causes: Tenant cooperators move away, their share of payments is lost; flood or drought strikes; management is poor.

For every $10 loaned to co-ops, about $7 have been repaid, a reasonably high proportion, especially since FSA borrowers are farmers to whom all other credit doors are tightly closed. As FSA co-ops grow and multiply, they demonstrate on a broadening field how the depression-made third of American farmers on relief, or on the edge of relief, can support themselves together if they get a chance to start.

Before You Buy A Mattress

*Here are some simple facts and definitions to help you select the best buy for your money**

KINDS OF MATTRESSES. There are, in general, two kinds of mattresses: Solid—mattresses filled with some resilient fiber; and innerspring mattresses. A third type of mattress: Those made of rubber, is too new and is yet too expensive to present much of a problem to most consumers.

MATTRESS FIBERS. Solid mattresses contain cotton, hair, kapok (a vegetable fiber), and sometimes excelsior, straw, or cotton waste. Labels should tell consumers which of these fibers is used, the grade of the fiber, and whether or not the material is new or reclaimed.

Hair mattresses at their very best contain hair from horses' manes, a very soft and durable hair, plus an admixture of the harder tail hair.

Cheaper hair mattresses are filled with hog's hair, which has a tendency to mat and become very hard. Cattle tail hair is used, too, despite a habit it has of giving off offensive odors during hot or damp weather.

The most acceptable hair mattresses contain 100 percent new hair that is odorless, free of foreign matter.

Hair-filled mattresses are expensive when they are of top flight quality, and in the lower grades they are less satisfactory than cotton mattresses. A good rule is to favor a cotton mattress whenever its price range overlaps that of another type of mattress.

Cotton-filled mattresses come in various grades. The very best are made from grade A cotton felt. This cotton felt consists of new cotton linters (fibers removed from cotton seeds), and at least 25 percent new cotton staple that is at least seven-eights of an inch long.

Cotton in mattresses is not always felted. In the cheaper variety, unfelted cotton linters are simply blown into the mattress ticking. Occasionally, too, raw cotton is used as mattress filling. Factory-made raw cotton mattresses are usually less desirable than felted cotton mattresses.

Kapok, a vegetable fiber from the East Indies, makes a soft mattress. It is very brittle, however, and unless the mattress is sunned and aired frequently, the kapok breaks down into dust particles. Doctors occasionally prescribe this type of filling for searchers after sleep who are allergic to other substances.

Very low priced mattresses are filled with excelsior, straw, and cotton waste. Occasionally these materials are sold under deceptive, but euphonious pseudonyms. Excelsior, for example, has been sold as "Pine Fiber" or "Wood Wool."

INNERSPRING MATTRESSES. Inner springs, as the name indicates, are used to give mattresses resiliency. Naturally springs must be padded over, and, of course, all commercial innerspring mattresses are padded on the top, bottom, and sides.

The padding in an innerspring mattress may be hair. Sometimes it consists of a layer of a cheaper material, sisal (a kind of hemp), and then a layer of hair. Occasionally it will be cotton and hair and sometimes a more expensive mattress will have hair with an overlaying of lambs' wool. A rule of thumb test for padding is to press down on the mattress with your hands. If the springs can be felt through the padding, be wary.

Inner springs in mattresses fall into one of two general classes. In one, each coil is enclosed in a cloth pocket and put in the mattress separately. In the other, coils are bound together into one huge spring by horizontal spiral wires.

How many individual coils a mattress should have to be comfortable and serviceable depends upon which type of spring the mattress contains, upon how many turns are taken in the coils, and upon whether or not the wire is high quality, tempered steel wire.

Where the springs are individually packaged many more springs are necessary than in the mattress which is made of coiled springs bound together by horizontal spiral wires.

The Federal Government, which purchases both kinds of innerspring mattresses, has worked out a set of specifications prescribing the type of wire that it believes should be used in innerspring mattresses, and which also specifies the number of coils which it feels should be used in each type of mattress. Interested consumers can get a copy of this specification by sending 5 cents in cash to the Superintendent of Documents, Washington, D. C. Ask for Federal Specification VM96.

There is also another specification for mattresses which contains worthwhile buying information. Worked out by hospital managers, the bedding industry, and the National Bureau of Standards, this specification is called "Mattresses for Hospitals," Commercial Standard CS–54–35. It sets up minimum requirements for innerspring, hair, and cotton mattresses for use in hospitals. It may be obtained from the Superintendent of Documents, Washington, D. C., for 5 cents in cash.

The number of coils in a mattress is quoted in stores on the basis of standard double bed size mattresses. Thus, a mattress for a single bed may be described as containing (say) 744 coils *per double bed* in the case of the individually packed coil spring, and (perhaps) 234 coils in the spring unit that does not use the individually packed coils.

Mattresses won't last long in a home if they can't be rolled or folded without injury. A good rule is to ask the salesman to roll or fold the mattress he is showing. The mattress should not squeak or make noises during folding and should resume its original shape immediately when it is unrolled.

TICKING. Ticking should be closely woven to prevent dust working its way through into the mattress and to prevent hairs and fibers from working their way out. It

MATTRESSES

---

*Based on information from the Consumer Standards Project, a WPA project sponsored by the Consumers' Counsel Division, Department of Agriculture.

shouldn't stretch, shrink, or fade from laundering, exposure to light, or from perspiration. Consumers should insist on explicit label guarantees.

Hospital buyers ordinarily purchase mattresses with an 8-ounce ticking; that means a yard of ticking 32 inches wide weighs 8 ounces. Home economists, too, urge consumers to insist on at least an 8-ounce ticking. Tickings in 6-, 7-, 8-, and 9-ounce weights come on commercial mattresses, and the thing to remember here is that the heavier the ticking the more durable it is likely to be.

Federal specifications call for ticking with blue and white stripes. As a rule printed tickings and brocades are less durable than plain weaves.

TUFTS hold the mattress together and prevent the filling from slipping out of place. Tufts should be arranged in a diamond pattern on the mattress and should be made of twine or tape which is drawn through both sides of the mattress, knotted, and then securely fastened at the ends with a metal strip or a rubber or composition button. Cotton tufts are not regarded as acceptable.

There are also mattresses with patented constructions which do away with tufts. Manufacturers claim that they are just as durable as the tufted variety. Being rid of the tufts is itself an advantage, but since there is little information available on the subject of tufts versus no tufts for mattresses, there is no way consumers can balance rival claims.

Since untufted mattresses fall into the expensive price classes, consumers choosing the inexpensive varieties should examine tufts carefully.

EDGES. Firm edges are necessary to prevent a mattress from sagging. The side walls of a mattress should be reinforced with quilting cloth, or felt, which is either tied or sewed to the ticking. Most desirable of the edges offered is the imperial edge which is square in shape, and which is held together by 4 rows of stitching. Other durable edges are made up with 2 thicknesses of ticking into which manila or cotton ropes are sewed. An additional precaution is a tape stitched to the edging which extends completely around the mattress.

BEDDING LAWS are primarily health laws intended to protect consumers from bedding articles containing unsterilized, contaminated, or otherwise undesirable second-hand materials. Frequently they also protect consumers against misrepresentation. Occasionally they require the disclosure of useful buying information. Quilts, comforts, pads, pillows, and upholstery as well as mattresses, usually come under bedding laws.

Thirty-six States and the District of Columbia have specific bedding laws. Some cities also have their own bedding ordinances.

These 12 States are without specific bedding laws (general health laws sometimes apply to bedding): Arizona, Florida, Idaho, Mississippi, New Mexico, North Dakota, Oklahoma, South Carolina, South Dakota, Virginia, West Virginia, and Wyoming.

Laws, where they exist, usually require that permanent labels, which must not be removed or tampered with, be attached to bedding. Most often these labels must be of a particular size and must be printed in easily legible type. Sometimes labels on bedding containing second-hand materials must be of a particular color, different from the color of the labels on bedding made of all new materials. When second-hand materials are used in bedding, some of the laws require that they be sterilized. Some second-hand materials may not be used at all. In practically every case the name and address of the bedding manufacturer or the retailer must be on the label, and very often the date the manufacturer sells the bedding article to the retailer must also go on the label. Generally bedding laws require manufacturers to tell what kinds of materials have been used in the mattress. Sometimes the amount of each kind of material used must be given, and in a very few States the grade of the material must be disclosed.

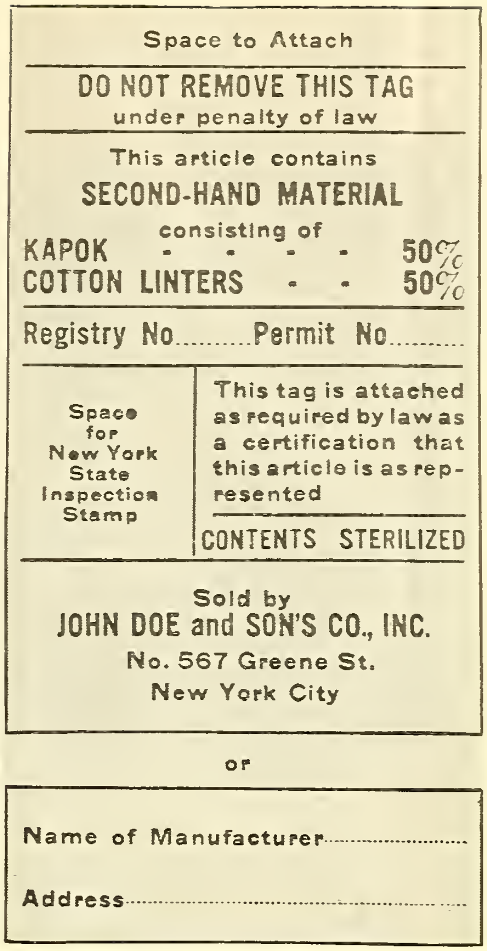
Even good bedding laws give consumers poor protection if they are not enforced. Safe enforcement requires an adequate number of competent officials and an appropriation large enough to enable the officers to do their work.

For information about your State bedding laws, write to your State capital.

Bedding laws do not ordinarily require mattress labels to tell consumers all the facts they need to make a wise purchase. For labels which enable you to purchase mattresses intelligently, you must look to mattress manufacturers.

MATTRESS LABELS COULD GIVE CONSUMERS THIS INFORMATION:

- Is the mattress new or used?
- If it's used, has it been sterilized?
- If it's a solid mattress, what type of filling does it contain? What's the grade of the filling? How much of each kind of filling material is used?
- If it's an innerspring, what kind of innerspring is used? How many springs?
- What's the gauge and quality of the wire?
- What kind of fabric in the ticking?
- What's the weight of the ticking?
- What kind of edging?
- What type of tufts and how many?
- Is the mattress guaranteed against the necessity of renovation for any length of time?
- How do you care for the mattress to get the best use out of it?



Space to Attach

DO NOT REMOVE THIS TAG
under penalty of law

This article contains
SECOND-HAND MATERIAL
consisting of
KAPOK - - - - 50%
COTTON LINTERS - - 50%

Registry No.......... Permit No..........

Space for New York State Inspection Stamp

This tag is attached as required by law as a certification that this article is as represented

CONTENTS STERILIZED

Sold by
JOHN DOE and SON'S CO., INC.
No. 567 Greene St.
New York City

or

Name of Manufacturer..........................
Address..

YELLOW TAGS cry out "second-hand" materials to the purchasers of mattresses in New York. The second-hand materials are safe since they must be sterilized, but the label prevents consumer deception. Twelve States have no bedding laws. In the other 36 States there are laws, and like all laws the effectiveness of these depends on the adequacy of their enforcement.

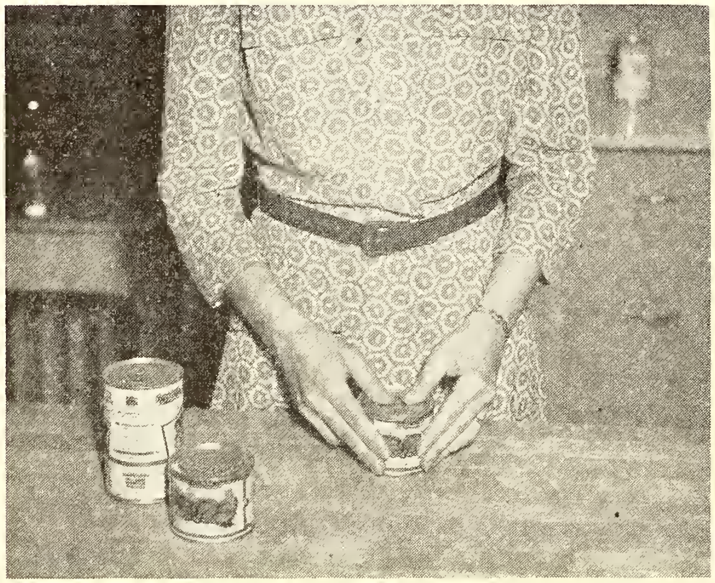
RULES FOR MATTRESS CARE. To get good service out of a mattress it must be given good care. Here are five rules for the care of mattresses.

1. Protect the mattress from tearing and from dust by a muslin mattress cover, and by placing a mattress pad between the spring and the mattress.
2. Turn mattresses at least once a week.
3. Air mattresses daily and sun them frequently.
4. Dust with a vacuum cleaner or a stiff brush once a week.
5. Don't sit on the edge of the mattress.

For Health and Safety, Guard Your Food

1. Potato salads, custards, home-cooked salad dressings, and other picnic foods containing eggs should be kept chilled from the time they are made until they are eaten, especially in hot weather. Don't prepare your picnic foods too early if you are carrying them a long distance.

2. If you plan to serve ground cooked meats for salads or sandwiches, keep the meat in the whole piece until just before it is to be used; then grind it. There is less danger of spreading any undesirable bacteria. Until the meat is served, keep it cool.



3. Bulgy cans mean spoiled food. If the top or bottom of a can yields very much to the pressure of your fingers, the can is suspect. A good rule is to use all canned foods within a year. They may not spoil beyond that period, but they may be inferior in quality.

4. If you have doubts about the freshness of any food, fresh or canned, don't run risks to your health by tasting it, or by attempting to salvage it. Throw it out, if you are a city consumer. Burn it, if you are a country consumer, so that animals cannot get at it.

Keeping foods fresh is an all-year duty of cooks, but summer temperatures make the job doubly important

5. Don't worry about keeping food in open tin cans if you keep the cans refrigerated and if you are as careful with it as with any left-over food. Foods kept too long in tin cans may get a metallic flavor, but the tin doesn't poison the food.

6. Quality in foods holds up better in cold storage than in warm. This is especially true of canned fruit juices. Keep in a cool dry place, preferably away from the kitchen heat. Sunlight sometimes affects the color of foods bottled in glass, so keep these in a dark place.

7. Nonacid foods, such as most vegetables and meat, should be canned in pressure cookers because pressure cookers make possible higher temperatures. Acid foods don't need to be canned in pressure cookers because acids in foods destroy bacteria.

8. When jellies ferment, the reason is they may not have been properly made, or improperly sealed. Fermentation happens most often when they are made with pectin preparations and brought only to the "rolling boil." Sufficient water remains to support fermentation.

Building a Bookshelf for Beginning Buyers

Here's a practical idea for young consumers starting in the serious business of managing new households

"SHALL IT BE this oil burner, or that?" you ask. "How can you transform a cheap cut of meat into a toothsome dish?" Maybe you wish there were some way of knowing exactly what quality you're getting when you buy Johnny's shirts. Or you're in dire need of a few scientific hints on keeping moths out of the clothes closet.

Domestic teasers like these can't wait on the hope that some day somebody may write a consumer encyclopedia with a ready answer for all your household problems. But consumer-bookshelf builders who have a yen for doing things for themselves can make a start toward a household consumer library by collecting some or all of the Department of Agriculture bulletins and pamphlets that we list below. In these bulletins you'll find answers to some of your everyday questions.

The listed titles do not represent all publications issued by the Department intended for consumers. But they are the more important ones. Of course, you can collect these publications, pile them in a heap on an empty shelf, and let them deteriorate into a collection of dust gatherers. Or you can be more scientific about it and make them into a sound foundation for a library that will ultimately reach into other fields that have to do with consumer interests.

One bright consumer who started her own consumer bookshelf began with these very publications. She bought a few cheap binders, one for each group of bulletins. She punched holes in the bulletins, put them in the binders, and then labeled the binders. Each bulletin inside then had a tab stuck on the edge of its cover to serve as a marker or index, quickly visible. That made the whole collection an easily usable reference library for a consumer who still is in search of a recipe, or a bug remedy, or facts on laundry equipment.

Publications that are free can be secured from the Department of Agriculture, Washington, D. C., unless otherwise noted. Those that are for sale should be secured from the Superintendent of Documents, Washington, D. C. Do not send stamps. Money order or coin are acceptable.

Remember when ordering to give the titles of the publications that you want, together with the numbers listed after each title.

FOOD

Buying and Growing It

A FRUIT AND VEGETABLE BUYING GUIDE FOR CONSUMERS, 167 MP. 10 cents. Gives quality hints and how to get a good buy in fruits and vegetables. Indicates the seasons at which these products are plentiful in various sections of the country.

CONSUMERS LOOK AT EGGS. 10 cents. Explains the meaning of Government grades on egg cartons, and tells which grades are suited to different home uses. Also describes the nutritional value of eggs. This bulletin is intended primarily as a study outline for a small consumer group.

THE INSPECTION STAMP AS A GUIDE TO WHOLESOME MEAT, 63 MC. 5 cents. Federal inspection of meat protects consumers from unsafe and unwholesome meat products. This circular, written in nontechnical language, explains what the round purple stamp means and how the Meat Inspection Service operates to the benefit of farmer, dealer and consumer.

U. S. GRADED AND STAMPED MEAT, 122 L. Free. Buying meat by Government grade betters your chance of getting quality for your dollar. Here Federal meat grades are listed and explained, and different types of meat cuts are identified for consumers.

MILK FOR THE FAMILY, 1705 F. Free. Milk is important in the diet. Read this to determine how much milk each member of the family needs, and how to choose your family milk supply. Also included is information on milk products and the use of milk in food preparations.

A QUIZ ON ICE CREAM. Free. (In press.) Write Consumers' Counsel Division, Department of Agriculture. When you buy ice cream you want to know how pure it is, what is in it, how much air it contains, and whether you get full measure. Read this if you want to learn how to get the answers.

INSIDE THE COFFEE CUP. Free. (In press.) Write Consumers' Counsel Division, Department of Agriculture. Coffee that tastes just right at breakfast can start the day off in proper fashion. Food and Drug Administration protects coffee consumers; but to get quality, follow the hints in this bulletin.

DIETS TO FIT THE FAMILY INCOME, 1757 F. Free. Good, balanced diets can be had at low cost if you plan and buy carefully. Here are four scientifically planned diets at four levels of cost with amounts stated for each member of the family. With these you can work out a balanced diet for any family. Sample menus and tables for making your food purchases are included.

GOOD FOOD HABITS FOR CHILDREN, 42 L. Free. Proper eating habits formed early in life can help develop a healthy adult. This leaflet has a number of sound suggestions for improving children's food habits.

THE CITY HOME GARDEN, 1044 F. Free. If you have a plot of land to till, this bulletin will get you started on the right track. In addition to giving advice on planting, it tells the tools you will need, the preparation of the soil, and general care of the garden. Specific information on planting of vegetable crops is also included.

PERMANENT FRUIT AND VEGETABLE GARDENS, 1242 F. Free. This is intended for the more ambitious home gardener. It gives instructions for the planting and care of a number of small fruits and perennial vegetables.

Preparing and Canning It

CONSERVING FOOD VALUE, FLAVOR AND ATTRACTIVENESS IN COOKING VEGETABLES, 265 C. 5 cents. Vegetables can be cooked the right way—and also the wrong way. Vitamins, flavor, and appearance of the foods can all be destroyed by improper cooking methods. This bulletin will help solve your vegetable cooking problems.

Trichinosis: A disease caused by eating raw pork, 34 L. Free. The way to prevent this disease is proper cooking of pork. This leaflet tells symptoms of trichinosis and gives general preventative suggestions.

Meat dishes at low cost, 216 MP. 5 cents. You can economize on your food budget without sacrificing either the nutritional needs of your family or appetizing menus. In addition to giving general hints about selecting low cost meat cuts, this leaflet has a number of tested recipes for meats that rate high in nutritional value and low in cost.

Poultry cooking. 5 cents. General hints on broiling, frying, roasting, stuffing, braising, stewing and steaming poultry. A time table for roasting young birds is included, in addition to several recipes.

Eggs at any meal, 39 L. Free. There is apparently no limit to the number of ways in which eggs may be served. Here are suggestions for making fruit whips, custards, souffles, and just plain omelets.

Dry skim milk. Free. Dry skim milk has practically the same food value as fresh skim milk and lacks only the butter fat and Vitamin A found in whole milk. This leaflet tells how to use dry skim milk as a way of improving the diet at low cost.

Aunt Sammy's radio recipes, revised. 15 cents. Four hundred of the most popular recipes and 90 menus compiled by nutritionists in the Bureau of Home Economics. All of these recipes and menus have been tested in Government laboratories.

Home canning of fruits, vegetables and meats, 1762 F. Free. The home canner will find this booklet an invaluable aid for doing the job completely and well.

Home-made jellies, jams, and preserves, 1800 F. Free. Suggestions for preserving, and recipes for making different types of preserves, go into this bulletin. The recipes have all been tested in Government laboratories.

CLOTHING AND FABRICS

Their Selection . . .

Rayon comes of age. Free. Write Consumers' Counsel Division, Department of Agriculture, Washington, D. C. The story of what rayon is, how it is made, how to identify it, and how it should be cared for.

Judging fabric quality, 1831 F. Free. Read this if you want to know how to identify cotton, linen, silk, wool, rayon and other synthetic fibers. There is also a description of how yarns and weave affect wear of garments. Color fastness, shrinkage control, and special fabric finishes are discussed.

Cotton shirts for men and boys, 1837 F. Free. Buying points for getting quality in fabric and fit of men's and boys' shirts. Both business and work shirts are described.

Fabrics and designs for children's clothes, 1778 F. Free. The very young children need clothing that fits well and comfortably. As they grow older, they want fabrics that are tough as well as well fitting. The Bureau of Home Economics tells here the results of its research on how to buy children's clothing.

Quality guides in buying ready-made dresses, 105 L. Free. Fabric, construction, and style should all be weighed against the price tag when you buy dresses. Simple hints for judging quality are included in the 8-page leaflet.

Hosiery for women: A buying guide, 342 MP. 10 cents. Getting quality in hosiery depends largely on your knowledge of how hosiery is made. This amply illustrated bulletin gives you quality guides as well as information on fit and care of women's hosiery.

When a woman buys a coat. 10 cents. Tells with picture and paragraph the story of coat quality from outer cloth to inner lining. Samples of good labels inform the consumer what she should know about materials and workmanship when she buys.

Leather shoes: Selection and care, 1523 F. Free. Contains information about different kinds of shoe leather, with facts on how shoes are made and how they should be selected. There is a concluding statement telling how to get the most wear out of shoes by proper care.

. . . And Care

Stain removal from fabrics: Home methods, 1474 F. Free. If you have ever been stumped in getting rid of a coffee stain, a grease spot on your best table cloth, or ink on your coat, you should file this one away as a first-aid manual against the next time a similar cleaning emergency occurs. In addition to describing the simple principles of cleaning, the bulletin includes a number of specific remedies for different types of stains.

Methods and equipment for home laundering, 1497 F. Free. Planning your laundry and choosing washing equipment is the problem this bulletin solves. In addition, the bulletin suggests methods of laundering, with particular attention to washing different types of fabrics.

Fireproofing fabrics, 1786 F. Free. Simple household formulas for fireproofing fabrics are described in this leaflet. Most kitchens have all the materials necessary to do the job.

ABOUT THE HOUSE

Home medicine cabinet. 5 cents. First aid in the home and what should be in your medicine cabinet in case of emergency.

House cleaning management and methods, 1834 F. Free. Cleaning with a plan will ease this most tedious of household tasks. From drawing up a work schedule to selecting the right types of cleaning equipment, there are suggestions here on how to do the job efficiently and without unnecessary work.

Finishing your floors and cleaning your walls. Free. (In press.) Write Consumers' Counsel Division, Department of Agriculture. Your floors and your walls will last longer if you know how to care for them. This bulletin contains advice to help you do the job.

FIREPROOFING CHRISTMAS TREES, 193 L. Free. This will be particularly useful during the Yuletide season.

WHEN YOU BUY COAL. Free. Write Consumers' Counsel Division, Department of Agriculture. Tips to consumers who want to make their coal dollars count in maximum fuel values. You will find facts here both on the purchase of coal and how to use it most effectively.

OIL BURNERS FOR HOME HEATING, 406 C. 5 cents. If you are in the market for an oil burner, this bulletin will help you determine what type to buy for your home. No specific standards are included, but there are suggestions on what to look for when you buy. There is also a statement on comparison of heating with coal and with oil.

TIPS FOR RUG BUYERS. Free. (In press.) Write Consumers' Counsel Division, Department of Agriculture. Knowing weave construction, amount, and kind of wool are steps toward getting your money's worth when you buy pile rugs. This gives facts on the purchase and care of rugs.

SLIP COVERS, 76 L. Free. Notes on selection of slip cover materials and how to make them fit.

GUIDES FOR BUYING SHEETS, BLANKETS AND BATH TOWELS, 1765 F. Free. In the absence of standards for these products, consumers must rely on their own information to be sure of quality. This bulletin tells what to look for and what to avoid when you buy.

SHOPPING FOR PAINT. Free. Write Consumers' Counsel Division, Department of Agriculture. The United States Forest Service gives cautions and cues for consumers in search of values in paint.

BEAUTIFYING THE FARMSTEAD, 1087 F. Free. Whether you live on a farm or in a suburb, you will find any number of ideas for sprucing up your home in this bulletin. Included are sketches for garden plans, and also suggestions for planting shrubs, flowers, and trees.

PLANTING AND CARE OF LAWNS, 1677 F. Free. You don't have to be an expert to grow a green, attractive lawn for your home. First, you select the right kind of seed, then follow the directions printed here for developing and caring for the lawn.

GROWING ANNUAL FLOWERING PLANTS, 1171 F. Free. The home gardener particularly should have this on her bookshelf. Whether you plan a formal garden or something less rigid in design, you will find many practical suggestions here. Included is a section on the use of hotbeds, and specific directions for cultivation of a large number of annual flowering plants.

ROSES FOR THE HOME, 750 F. Free. Whether you are ambitious enough to plan a rose arbor, or whether you simply desire a small border of roses around your garden, you will find the way to do it in this bulletin. Instructions include how to prepare the soil, planting, pruning, spraying, and selection of different varieties for different purposes.

OUT WITH PESTS!

THE CONTROL OF MOTHS IN UPHOLSTERED FURNITURE, 1655 F. 10 cents. Prevention is better than cure in keeping moths out of furniture. Here you will find suggestions both for guarding furniture against moths and for getting rid of them.

CLOTHES MOTHS, 145 L. Free. Tells the wrong and the right ways of preventing moth infestation and checking it once it has started.

HOUSE ANTS, 147 L. Free. Poison baits, sprays, and chemicals are all effective death warrants for ants that have invaded the house. The leaflet tells how to make most effective use of these remedies.

HOUSEFLY CONTROL, 182 L. Free. Intended specifically for the farm, this bulletin is also useful to the home owner bothered by the ordinary housefly.

CARPET BEETLES, 150 L. Free. This pest can ruin furniture and clothing, as well as carpets. Simple household remedies will get rid of them.

COCKROACHES AND THEIR CONTROL, 144 L. Free. There are 5 different kinds of cockroaches that may find their way into your kitchen or pantry. To get rid of them you must first find their hiding places, then either poison them or block up their homes. This bulletin tells how to do both.

BEDBUGS, 146 L. Free. Shrewd and adept at finding hiding places, this particularly obnoxious pest may be found anywhere in the home. Methods for getting rid of them, ranging from a community effort to individual application of poisonous liquids, are described here.

SILVERFISH, 149 L. Free. Your book bindings, lace curtains, and even wall paper can be destroyed by these insects. Department of Agriculture chemists have developed a poisonous formula to be made in the home which can get rid of any infestation.

FOR REFERENCE

CONSUMER SERVICES OF THE DEPARTMENT OF AGRICULTURE. The Department of Agriculture serves consumers in a hundred different ways. Here are listed those agencies directly interested in consumer welfare, the work that they do, and publications of interest to the consumer. Write for this to the Consumers' Counsel Division, Department of Agriculture.

CONSUMERS' BOOKSHELF. Consumers' Counsel Series Publication No. 4. 15 cents. A bibliography of free and low cost publications on commodity buying and related consumer problems; also contains aids to teachers of consumer economics.

BALANCING YOUR BUDGET

PLANNING AND RECORDING FAMILY EXPENDITURES, 1553 F. 5 cents. You can make your dollar go further by watching where it goes. Here are 3 different methods for planning your expenditures and recording them once they have been made.

FARM FAMILY ACCOUNT BOOK. 15 cents. Intended only for farm families. Can serve both as a budget book and as one way of analyzing the income and outgo of the family.

●

KEEP CONSUMER MINDED!

Consumers' Guide. Consumers who already subscribe to the *Guide* know that its objectives are to make your dollar go further and also to bring an understanding of the farm program to its readers. If you are not already getting the *Guide* and would like to receive it, write the Consumers' Counsel Division, Department of Agriculture, Washington, D. C.

ENGINEERS in the Bureau of Agricultural Chemistry and Engineering draft plans to restore gullies like these into tree-covered slopes. Here checkdams make running water walk, while layers of straw and brush anchor the soil until grass and shrubs can take hold.

Conservation Queries

More answers to more questions on how Government is lending a hand to farmers in their long pull toward nationwide conservation of the soil [*]

WHAT ROLE DOES THE SOIL CONSERVATION SERVICE PLAY IN THE NEW CONSERVATION POLICY?

First created with emergency funds in 1934 and established in the Department of the Interior, the Soil Conservation Service was made a permanent agency by the Soil Conservation Act of 1935 and transferred to the Department of Agriculture.

First weapon used by the Soil Conservation Service was the demonstration project. Here and there throughout the country, where erosion had outrun the efforts of farmers, the Soil Conservation Service went in and told the farmers about its work. When a group of farmers agreed to join together to see what could be done to put every acre of field, pasture, and woodlot of every farm to its best possible use, and to repair soil damages due to past neglect or misuse, the SCS then made an agreement with them to help in a 5-year soil-conserving plan through technical supervision, the loan of machinery, and in some cases, with labor supplied by the CCC or the WPA.

These demonstration projects became examples to farmers for many miles around. Even the farmers not living in the demonstration area learned of the soil-conserving methods and put them into practice on their farms.

One thing farmers all over the country have learned is, that a single farm is often too small a unit to work with if soil-conservation measures are to be generally effective. To get around this problem, recently 38 States have enacted Soil Conservation District laws. These enable the farmers in an area to form a soil-conservation district. The district plans for an entire area. To put a plan into effect, a district may petition any agency of government—Federal, State, or local—for help. The Soil Conservation Service lends to districts technical guidance and machinery to carry through their program. When bad farming practices by some farmers in a district threaten to jeopardize the soil-conservation program for the entire area, the district may pass regulations, to be approved by the farmers, fixing responsibilities. Then if the recalcitrant farmer

---

[*] *Part III in a series of 4 articles on soil conservation. Previous articles appeared in the April 15 and May 1, 1940, issues.*

doesn't comply, he may be forced by legal action to do so. Maintaining a soil-erosion hazard, farmers believe, is as bad in the country as maintaining a fire hazard in the city.

WHAT OTHER CONSERVATION JOBS DOES SCS WORK ON?

Soil Conservation Service works with the Farm Security Administration and the Bureau of Agricultural Economics on a Water Facilities Program. In arid western areas, it lends small sums, usually less than $1,000, to farmers or groups of farmers to enable them to build ponds, dams, reservoirs, tanks, irrigation works, underground storage pools, or any other kind of tested contrivance which can be used to store up precious water against drought and desert. To get a loan, which must be repaid in 20 years, farmers agree to supply part of the labor and materials for the program and promise to practice sound farm management.

Under the Flood Control Acts of 1936–38, the Department, acting through the SCS, the Forest Service, and the BAE, shares responsibility with the War Department in a coordinated effort to control floods. The Department of Agriculture's job is to help farmers reduce the amount of water running off the surface of the land.

Again, with other agencies of the Department, the SCS helps to put to work the Bankhead-Jones Farm Tenant Act. This three-pronged law, passed in 1937, provides for the loan of money to tenant farmers to enable them to become farm owners; for rehabilitation loans to farmers in need; and finally it authorizes the Department to buy up poor lands on which families are struggling hopelessly to earn livings and to put the lands to better uses, as recreation areas, wildlife preserves, range areas, pastures, and forests.

The SCS is also a research agency which conducts hundreds of experiments in the sciences of soil conservation.

The Farm Security Administration has the major responsibility in what has been called the conservation of human resources on the land. Under the Bankhead-Jones Farm Tenant Act, it lends money to farm tenants to help them buy farms of their own. It also lends money to needy families.

One out of every 10 American farm families is now cooperating with the Farm Security Administration through its rural rehabilitation loans.

FSA now gives special attention to soil-conservation practices, in drawing up loan contracts.

By exerting its influence in behalf of farm tenants, the FSA is getting the wide adoption of a new type of farm lease between landlord and tenant, which encourages, rather than discourages, soil conservation practices. Longer term leases are urged, and leases which give greater security to the family of the tenant farmer.

Borrowers from FSA are also encouraged to follow better farming practices, to rotate and diversify crops. Loans from now on will not be paid to farmers who intend to raise only one cash crop.

Farm Credit Administration, another Department of Agriculture agency, has, over a period of years, succeeded in bringing down the interest rates on farm mortgages, thus taking some of the pressure for cash off farmers, enabling them to pay more attention to the needs of their farms and less to the demands of their mortgage holders.

Forest Service, the conservation agency of the Department of Agriculture which deals with forest lands, manages almost one-fifth of the Nation's remaining forest lands. It manages the forests so that the soil, timber, water, wildlife, grazing, recreational resources and human opportunities which depend on them will be maintained. It cooperates in tree-planting projects on the western plains, and it joins in the AAA and Soil Conservation Service programs to recover wasted range land in the West.

Botanists in the Department search out plants that are suitable for erosion control plantings. Other experts in animal husbandry carry on research to find new ways to combine livestock production with conservation practices. Engineers work out techniques for mechanical erosion control; that is, they develop new types of dams, new methods of ploughing, and new farm practices to help save the land. Physicists study the action of wind and water on the soil to detect possible problems which must be met, and to find new methods of meeting old problems. Chemists analyze soil to find which soils are most and least susceptible to erosion, and what measures must be taken to restore wornout or depleted soil. Agronomists work out plans for the best methods of planting to avoid wind and water erosion.

Inside the Department of Agriculture, which has most of the responsibility for soil conservation, the Bureau of Agricultural Economics acts as a fact-finding body which conducts surveys and gathers information applying to all of these programs.

It pieces together information gathered by research workers in Federal and State agencies and matches it against the actual experience of farmers. Through the Extension Service and the State Agricultural Colleges, it feeds information back and forth so that both the research worker and the farmer know what problems the other is facing.

Above all this, it works out plans to guide future conservation activities.

DO OTHER DEPARTMENTS OF GOVERNMENT HELP ON THE CONSERVATION JOB, TOO?

Yes, outside the Department of Agriculture, the Fish and Wildlife Service (effective July 1) works on the problem of conserving the wildlife in the skies and forests, and the fish in the streams.

The Grazing Division of the Department of the Interior manages publicly owned grazing lands. Under the Taylor Grazing Law, it is authorized to trade Federally-owned land for privately-owned land. By this method blocks of Government-owned and privately-owned lands are being built up which can be used to conserve the range most efficiently.

The Bureau of Reclamation is recapturing land from the desert through dams and irrigation projects.

The General Land Office of the Department of the Interior, originally created to give away land under the Homestead Laws, now administers certain grazing areas.

The War Department works on flood control and stream erosion.

Tennessee Valley Authority, with the cooperation of all the other agencies, has an extensive and coordinated conservation program for application in the Tennessee Valley.

IS THERE ANY FEDERAL AGENCY WHICH FITS ALL THESE ACTIVITIES TOGETHER?

Yes, the National Resources Planning Board, which is a part of the Executive Offices, works out over-all plans with the cooperation of all these agencies for the conservation of the Nation's resources.

HAVE CONSERVATION ACTIVITIES SO FAR ACHIEVED ANYTHING?

Yes, they have, though statistics don't measure the progress. The fact that 6 million farmers are actively working for conservation in greater or less degree today is a 7-league step forward for conservation.

There are some illuminating statistics.

In 1938, the Agricultural Conservation Program covered 321 million acres of cropland and the Range Conservation Program an additional 190 million acres of pasture and grazing land.

American farmers planted 25 million acres to green manure and cover crops; 30 million acres to legumes and grasses.

More than 2 million acres of pasture land were improved.

These were planted and other forestry improvement practices were carried out on nearly 200,000 acres.

Terracing, strip-cropping, contour farming, and other erosion-control practices were carried out on 20 million acres.

Fertilizers to the amount of 5½ million tons were applied.

Well over 28 million acres of range land were reseeded.

To conserve and develop water on the range, 21,000 earthen tanks and reservoirs were constructed.

On nearly 2½ million acres, destructive plants were eliminated and erosion was checked.

The SCS was working in 573 demonstration projects and CCC camp work areas, including 100,000 acres. To date 258 soil-conservation districts have been organized. There are more than 1 million farms including 155 million acres in the farmer-organized districts. SCS is already cooperating with 204 districts in carrying out coordinated programs of erosion control.

This is part of the record for 1938. Each year more farmers are practicing more conservation. With the new emphasis on soil-building and conserving practices, with new inducements to put them to work, the records for later programs are expected to roll up even larger figures than these.

I AM A WORKER-CONSUMER-BUSINESSMAN-PROFESSIONAL-PERSON-UNEMPLOYED, AND I LIVE IN THE CITY. WHAT DOES SOIL CONSERVATION MEAN TO ME?

If soil continues to be lost faster than it is saved, years of scarcity and high prices will appear more and more frequently.

As farm families give up the struggle to wrest livings from wornout farms, more of them will be forced on relief, increasing the cost of the social services.

Men forced off exhausted farms add to the supply of cheap labor, and thus push wages down.

Work in factories and sales by city businesses depend upon prosperous farm families. As farm living levels are pulled down by unproductive soil, city business loses opportunities for profit, and workers lose job opportunities. Farm crises produce industrial depressions.

When farm incomes go down, the ability of farm communities to maintain schools, health services, and social services declines, so that as soil productivity drops off, the cultural level of entire communities drops off at the same time. The end result of this downspiral is widespread poverty, with its accompanying national ill health and loss of national well-being.

GENERAL STAFF of America's army of soil conservationists is recruited from science. (1) Botanists and animal husbandry experts in the Bureaus of Plant and Animal Industry conduct experiments which lead finally to the action programs designed to turn man-made deserts into grasslands for grazing. (2) Soil conservationists must turn a hand to the test tube as well as to the plough to find out what uses the soil should and should not be put to. (3) In the end the man who holds the soil is the farmer. It's his on-the-spot job to preserve the Nation's most valuable heritage. Triple-A payments help him pay the cost of investments in the soil.

IN THIS ISSUE

MAY 15, 1940 ● VOLUME VI, NUMBER 16

A Cooperative Way Out of Want . . . 3
Before You Buy A Mattress 6
For Health and Safety, Guard Your Food 8
Building A Bookshelf for Beginning Buyers 10
Conservation Queries 13

For Sale by the Superintendent of Documents, U. S. Government Printing Office, 5 cents per copy, 50 cents per year, 80 cents, foreign.

1.94
Ad422C
RL

CONSUMERS' GUIDE

JUNE 1940

REFRIGERATORS

DOLLAR STRETCHERS

INVESTING IN SOIL

FOOD BILL

CONSUMERS' GUIDE

JUNE 1940 VOLUME VI, NUMBER 17

A Publication of the
Department of Agriculture
Washington, D. C.

Issued monthly from June through
September; Semi-monthly from
October through May

Prepared by
Consumers' Counsel Division

D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

WHAT THIS COUNTRY NEEDS, an expansive Vice President once said, is a good 5-cent cigar.

Under different circumstances, the director of the public relief agency in New Orleans arose during a meeting in one of the ballrooms of a downtown New Orleans hotel and said, substantially, what this city needs is a 5-cent quart of milk.

The relief director wasn't catchphrasing or wisecracking. "Most of the people on relief in New Orleans are there because of undernourishment. I would say that if we went back to the basic source to find out why we are carrying these people, 50 to 60 percent of the cases would be due to undernourishment.

"If we could give milk, we could materially lighten the relief load, not today, but perhaps 10 years from now. We are extremely worried about the children. . .

". . . red beans and rice and molasses and bread are the staples of diet, particularly in the families of laborers in underprivileged families and among Negroes. . .

"You can go out here and look at your diseases and malnutrition. . . on the street—rickets and things of that kind. . ."

The relief director was speaking at a hearing held by the United States Department of Agriculture for the purpose of getting evidence on how the Milk Marketing Agreement and Milk Order for New Orleans should be amended.

Federal milk marketing agreements and orders in general fix the prices which distributors pay dairy farmers for their milk. These agreements and orders may be issued by the Department of Agriculture in cities where a substantial part of the milk used moves across State lines. Many of these agreements and orders now provide a special price which dairy farmers receive for that milk which is sold to relief families under approved low-cost milk programs. Nickle-a-quart milk, under such a provision, has been on sale in Boston (see November 1, 1939, issue of *Consumers' Guide*) and in Chicago for some time.

When it was suggested that the New Orleans Milk Marketing Agreement and Milk Order be amended to permit the sale of milk at 5 cents a quart to families receiving public assistance in New Orleans, the relief director had his chance to speak up.

Getting 5-cent milk takes more than good intentions. It requires cooperation of different kinds from farmers, distributors, local relief agencies, and the Federal Government.

This is how it works, in the broad. Farmers get a price for relief milk which is lower than the usual price they get for milk sold for bottling, but higher than the price they get for milk used in making milk products.

Distributors agree to take over the job of pasteurizing and delivering the milk to the homes or depots where certified relief families get it. For the plan to succeed, they must offer to do this job at a minimum charge. Average net charges of distributors before July 1, were running in Boston at 1.3 cents per quart; in Chicago at 1.4 cents for milk delivered to stations, and 3.7 cents for a quart of milk delivered to a relief home.

City governments have a job to do, too. Their relief agencies agree to certify the families who are eligible to buy nickel milk and the amount they may purchase. In Chicago, the city pays the 5 cents, the price of milk delivered to homes, and 4 cents for a quart bought at a milk station. In Boston, relief families pay 5 cents out of the cash relief funds paid them by the city (WPA workers buy milk for 7 cents). City relief agencies set up and manage the depots, with WPA help, where Chicago and Boston relief families can get their milk.

By the time 5-cent milk is pushed over the counter or delivered, it has cost more than 5 cents. This is where the Federal Government, through the Surplus Marketing Administration, comes in. With money authorized by Congress, the Government agrees to pay the difference between the actual cost of the delivered milk and the direct or indirect contributions made by the city. In Boston, the subsidy amounts to about 0.72 cent a quart; in Chicago, it is 0.98 cent for station-delivered milk, 2.3 cents for home-delivered milk.

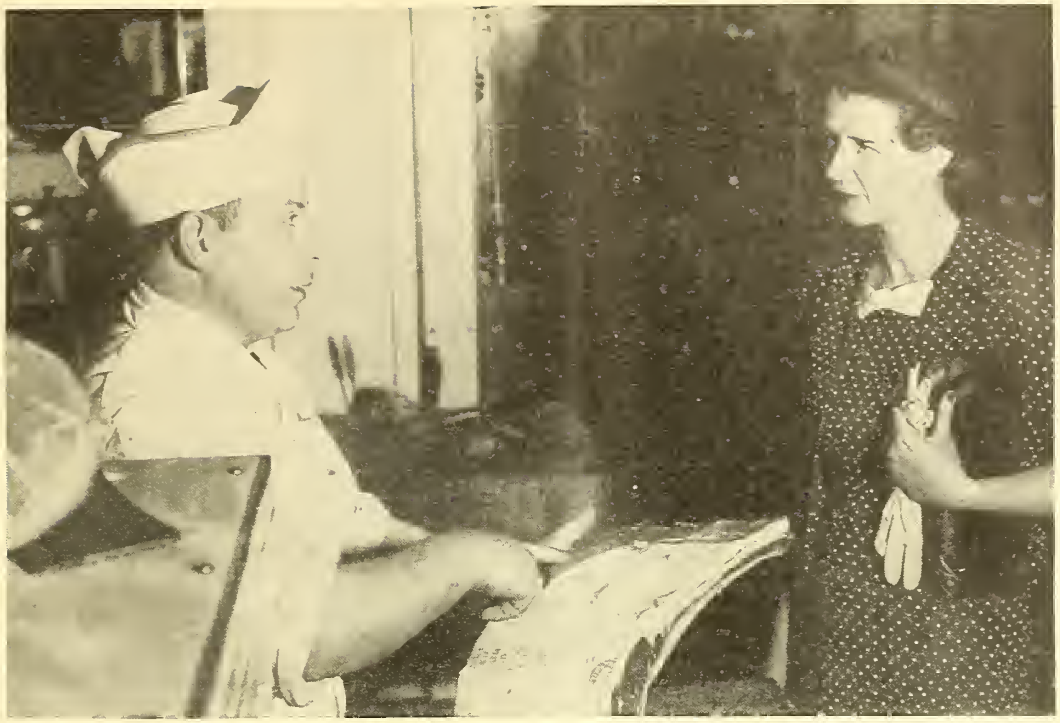
On May 15, all the machinery for supplying needy families in New Orleans was in mesh and ready to start. Farmers had agreed to accept 4.3 cents a quart for relief milk. Ordinarily, they get about 5 cents for the same milk sold in bottles to other consumers, and about 4 cents a quart for milk sold to make butter, or cheese, or ice cream. Milk distributors agreed to handle milk for relief families at an average cost of 2.68 cents a quart, which includes the cost of selling the milk at depots, because WPA labor cannot be used for this service in New Orleans as it is in Boston and Chicago. (Beginning July 1, this cost will be cut to 2.53 cents per quart.) The city relief administration has arranged for depots, is certifying eligible families; those on relief pay for the milk out of their cash relief payments, those on WPA pay for it out of their wages. The Federal Government is helping by chipping in an average of 2.68 cents a quart. On July 1, this will drop to 2.53 cents.

How much milk actually flows into the homes of needy families along this nickel route depends on how much these families take advantage of it. So far as they are concerned, they are free to pass it by if they wish. But Boston and Chicago families have been quick to line up. From early August last year to the first of March this year, something like 62,000 quarts of relief milk have been purchased by Boston families every day. In Chicago, some 92,000 quarts a day are moving into needy homes. Still another plan for penny-a-glass milk for Chicago's school children, operating similarly with farmer-distributor-city-U. S. Government collaboration, is being worked out to put this health-giving food within reach of people who otherwise would not get it. In New Orleans, whose milk plan is still young, about 9,000 quarts a day are being purchased.

Consumers in other cities probably wonder why Boston, Chicago, and New Orleans have led in this campaign to apply the milk cure to their health and diet problems. The plan can be put into effect in any city where a Federal Milk Marketing Agreement or Order is in effect and where the order or agreement provides for low-cost milk. Cities that qualify for 5-cent milk right now, but which don't have it are:

Cincinnati, Ohio; Fall River, Mass.; Kansas City, Mo.; La Porte, Ind.; Louisville, Ky.; Lowell-Lawrence, Mass.; the Quad Cities—Bettendorf and Davenport, Iowa; Rock Island, Moline, East Moline, and Silvis, Ill.; New York, N. Y.; St. Louis, Mo., and Washington, D. C.

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.



Buying Meat by Grade

New rules for Government grade labeling of meats make this guide to values more useful for consumers

SEVENTEEN YEARS AGO a finicky *maitre d'hotel* of a large American steamship line decided he ought to do something about the meat he was getting.

As the matter stood, it was too much of a hit-or-miss proposition. One day he would call up a dealer, put in his order for a couple hundred pounds of beef, and on delivery find that his purchase met his quality standards. A few days later, he would call up that same dealer, make a similar order, and discover that the quality of the meat was below the standard wanted.

Here was a buyer who bought carcasses, not cuts. But he found himself pretty much in the same boat as Mrs. Average Consumer at the meat counter. He wanted to be sure of the quality he got for his dollar every time he bought. For him, a daily tour of packers' coolers was out of the question. To depend on trial and error was expensive and sometimes ruinous to his reputation and service.

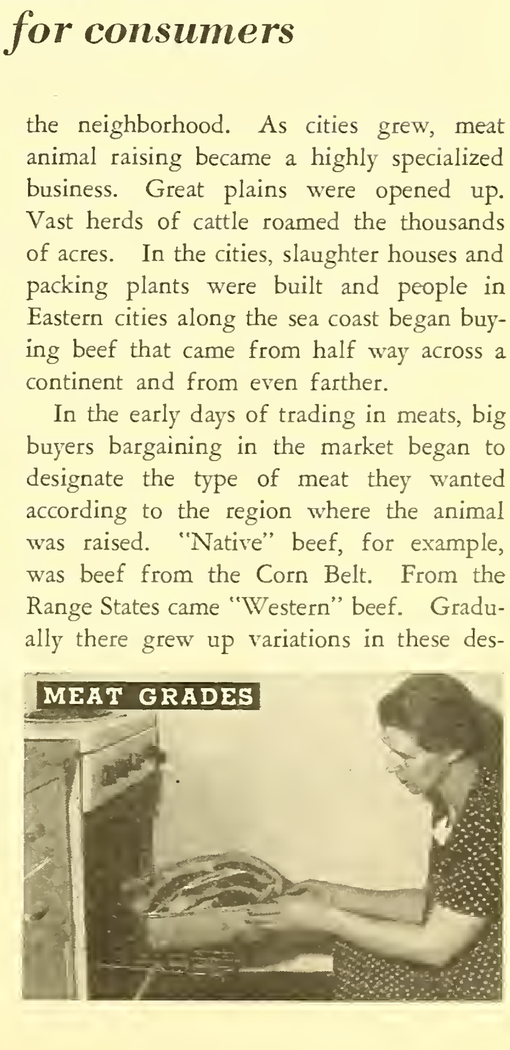
What was needed was some assurance of meat quality at the time he bought. He wanted to be able to buy grades of beef just as his company specified certain grades of steel when it laid down hulls for its ships. But grades for meat—to be of any use—had to be standardized, not haphazard designations on which no 2 packers agreed. For this standardization he turned to the U. S. Department of Agriculture which for a few years had been using tentative standards on classes and grades of beef as well as other types of meat in its work as a reporter of market news.

In a few weeks the buying agent was still buying beef over the telephone or by written orders. But now it was not "a hundred pounds of beef—and make it good!" Instead he could ask his local supply house for "a hundred pounds of Government-graded Choice Steer" and be reasonably sure of getting the quality he wanted.

TODAY'S HOUSEWIFE CAN LOOK TO THIS buying agent as the pioneer consumer to get Government-graded meat. It wasn't long before fellow members of the beef-buying profession—buyers for hotels, clubs, restaurants—took to the idea and began to specify "Government-graded meat" when they bought.

There was a day when housewives knew the quality of their meat because it came from animals raised and slaughtered at home or in the neighborhood. As cities grew, meat animal raising became a highly specialized business. Great plains were opened up. Vast herds of cattle roamed the thousands of acres. In the cities, slaughter houses and packing plants were built and people in Eastern cities along the sea coast began buying beef that came from half way across a continent and from even farther.

In the early days of trading in meats, big buyers bargaining in the market began to designate the type of meat they wanted according to the region where the animal was raised. "Native" beef, for example, was beef from the Corn Belt. From the Range States came "Western" beef. Gradually there grew up variations in these des-



ignations, such as "Choice," "Good," "Medium," and "Common Westerns."

Designations such as these, it turned out, were about as scientific as looking at the moon through a pair of opera glasses. But this was nothing compared with what happened when cattle originating in the Range States were shipped off to the Corn Belt for feeding. Meat designations, as used by the trade, become confused to the point of complete uselessness. Furthermore, they lacked even common acceptance. Meat called "Good Native" by one packer was "Choice Western" for another. There was nothing systematic or scientific in the way beef was described between traders or between regions. And what was true of beef was true also of other kinds of meat.

Ranchers and packers began to grumble and complain. "There ought to be a law," they argued. Researchers at the Agricultural Experiment Station of the University of Illinois, heeding the grumbling, tried to straighten out the chaos. In 1902, they listed all existing meat designations, defined and interpreted them. The results of the study got tucked away in a bulletin.

Flip the pages of the calendar 14 years—to 1916—and you reach another significant moment in the history of meat grades. That year, the U. S. Department of Agriculture pulled the Illinois study out of the files and used it as a starter in setting up its first tentative standards for classes and designations of beef. These designations were not intended to be quality guides to consumers, but were planned merely to simplify the Government's job of market news reporting. Establishment of these trail-blazing beef designations was followed in short order by tentative designations for lamb, veal, mutton, and pork.

Here were standard descriptions that had many more elements of importance than had the old trade designations for meat. They took account of such things as conformation and fat distribution, the appearance of the meat itself, as well as the section of the country where the animal was brought up. But they were never stamped on meat carcasses. They were used only in reporting market supplies and prices.

In 1923, when the buyer for the steamship firm decided to order his meat by the Government's grade designations and so became the first consumer to use this Government service, the need for re-examination of grade designations became more acute.

Grades were not actually examined into, however, until 3 years later—in 1926. As a result of hearings, revisions in the grades were made. These were subsequently issued as official United States standards for grading beef, lamb, veal, mutton, and pork. Despite the fact that grades were now available to consumers if they asked for quality labeled meat, it was producers, not consumers, who got behind grading and pushed it along.

Red-letter day in the history of meat grading is May 2, 1927. Early that morning officials of the Department of Agriculture, grade stamps in hand, walked into packing plants in 7 of the Nation's large cities, and quality grading of meat as we know it today was underway.

At first, grading was restricted to "Choice" and "Prime" grades of steer and heifer beef. By January 1928, the experiment had become successful enough to include the "Good" grade. A little later the service took in all grades of beef, lamb, veal, and mutton of all classes.

But it was over a year before experimental grading and stamping became a regular service of the Department of Agriculture, put on a fee basis to cover its cost.

Here the story for beef grades sidetracks into its own separate chapter. From their earliest beginnings, grades for beef had always been based on a triple set of standards, one for each class—or type—of beef, such as steer, heifer, and cow. That meant there was a "choice" grade for steer, for heifer, and for cow, a "good" grade for each class of beef, and so on down the line. Those class differentiations were carryovers from the days when retailers bought beef in terms of live cattle. A bulletin of the Department of Agriculture explains this situation this way: "Except in the case of the very young of all species, sex condition affects the character of the carcass, and this in turn influences the prices which a given class will bring, as compared with the price received for another class. For instance, a steer beef carcass is more desirable than a cow beef carcass of the same grade; hence, steer beef sells at a relatively higher price than does cow beef of a comparable grade."

WHOLESOME meat bears a round purple stamp; quality graded meat bears the long ribbon stamps. Don't confuse the two. All meat sold from one State to another must be inspected and passed by the U. S. Government; the round purple stamp means that the meat is wholesome. Quality grading is not compulsory; you can get graded meat, however, if you insist your butcher obtain it for you.

More simply this means that a consumer buying Government-graded beef was expected to know that the same grade in the 3 classes of beef did not always mean the same quality. Having a triple standard was useful to traders—the wholesalers and big buyers—because the amount of meat obtainable from a carcass varies with the sex and age of the animal. But for the ordinary household consumer, it muddled the whole picture. It meant the equivalent of carrying along a dictionary of meat grades every time she bought, if she was to know accurately what she was getting.

The danger was always present, too, that unscrupulous dealers would palm off a "Choice" cut of heifer beef, when the consumer asking for the "Choice" grade meant the best grade available, or "choice steer."

To guard against such consumer confusion, last year the Department of Agriculture made a new proposal to producers, consumers, and meat packers. Why not do away with class designations altogether, so far as the domestic consumer is concerned but show them on grading certificates, the Department asked. That would give dealers the information they need, but eliminate a designation consumers don't need. Quality marks would then boil down to 5 simple grade names: Prime, Choice, Good, Commercial, and Utility. That—and no more—would be all the consumer would have to remember when she asked for Government-graded beef.

Packers, dealers, consumers took to the idea at conferences called by the Department of Agriculture for discussion of the plan. The simple fact that what consumers wanted was a grade designation on a cut of beef was the keystone of the plan. Such a grade stamp would improve their chances of getting the quality they pay for.

And there you have chapter 3 in this thumb-nail history which brings the story down to the present.

TODAY YOU CAN BUY GOVERNMENT-GRADED beef that is graded according to this "single standard." All you have to remember are these grade names and their place in the quality scale of beef from top to bottom: Prime, Choice, Good, Commercial, and Utility.

Beef is graded on the basis of quality, finish, and conformation.

"Quality" is defined as color, texture, grain, and degree of marbling of the beef.

Finish is judged on the quantity of fat, its color, character, and the way it is distributed in a cut of beef.

Conformation is the general "build" and appearance of the beef. For consumers, its importance lies in the fact that a cut rating high in conformation has a large proportion of edible meat to bone.

HERE IS WHAT THE BEEF GRADES AS NOW used mean:

Prime: The highest grade of beef, but available in very limited quantities, usually in late fall and winter. Domestic consumers rarely see it. Used almost exclusively by hotels, restaurants, clubs. Produced only from specially fed steers and heifers which represent the highest degree of perfection in breeding.

Choice: Highest grade of beef commonly available to consumers. Marketed year-round in the Middle West and the East, and available in limited quantities in the West. Usually cuts are relatively fat and require considerable trimming. Produced from steers and heifers specially nourished on concentrated feed.

Good: This grade meets the needs of consumers who have small food budgets and want the best quality they can get for moderate prices. Sold in all sections of the country throughout the year. Carries enough fat for average needs, but not enough to require heavy trimming before serving. Produced largely from steers and heifers fed intensively on concentrated feed for varying lengths of time. From this grade down the manner of cooking requires attention. Tougher meats can become more tender with proper cooking.

Commercial: For consumers with tight food budgets able to buy beef only if prices are below average. Has very little excess fat. Produced from steers and heifers and relatively young cows fed largely on grass or roughage, and fed concentrated feed for only a short time.

Utility: Lowest Government-graded meat usually available to consumers. This grade obviously includes meats which are not tender but can be made palatable by careful and imaginative cooking. It should be sold at the lowest price. Produced from steers and heifers fed largely or entirely on grass or roughage and from cows producing beef deemed suitable for sale in the retail market.

GUESSING what quality you get each time you buy meat can be a costly business. You can tell what an official grader thinks of the meat if you ask to see the quality mark. Quality graded meat carries the mark all the way down the length of the carcass. Beef grades, from top to bottom, are: Prime, Choice, Good, Commercial, Utility.

CHEAP CUTS REQUIRE LONG AND CAREFUL cooking. The Bureau of Home Economics, U. S. Department of Agriculture, Washington, D. C., will tell you how to cook these cuts for best results. And remember that lean meat—no matter what kind, cut, or grade it is—has practically the same food value.

Grades for other kinds of meat remain unchanged. For veal, lamb, mutton, they are: U. S. Prime, U. S. Choice, U. S. Good, U. S. Medium, and U. S. Plain. Medium and Plain for these meats correspond to Commercial and Utility Grades for beef.

Neither Government nor producers claim that meat grades as they exist today have reached final perfection. Experience has shown, however, that present grades are a fairly dependable guide to quality for consumers and are a great advance over grades that vary with the house that sells the meat. Putting the grades through the mill of re-examination and revision has happened before; it is likely to happen again.

Up to now grades have grown out of producer practices and needs. Maybe laboratory scientists will discover that there are even more accurate factors than those now used for determining variations in quality from the consumer viewpoint. Perhaps the perfect system of grading will take account of how the meat is to be used in cooking.

MORE RESEARCH IS NEEDED ON MANY fronts. Should grades take into account the length of time meat has been aged? Do grain-fed animals always yield the best quality meat? Such questions as these can be answered only after the laboratory workers do more analysis and testing.

Meantime, here for consumers are guides to quality which, while not infallible, provide a greater safeguard against paying for quality you don't get than does the time-dishonored method of guessing.

The grading service today reaches into all important meat packing centers in the country. Beef sold to consumers bearing the Government grade mark represents about 10 percent of the total amount of meat Federally inspected for wholesomeness; the percentage is slightly smaller for other kinds of meat.

Meat grading—as has always been the case—is voluntary. Any retailer can get Government-graded meat by ordering it from his wholesaler. That means it's up to the consumer to ask for cuts that are Government-graded if they are not available in his local markets.

Grading is done by trained experts who must have had at least 6 years of experience

[*Concluded on page 15*]

So You're Buying a Refrigerator?

Careful consumers count costs three ways before investing in this important piece of household equipment. Bureau of Home Economics experts tell you features to watch for

IN THE DAYS before inventors figured out ways of plugging scores of household tools into electric outlets, the choice of a refrigerator was simple. There was nothing to do but buy an "ice box" or stick to more primitive cooling methods—hanging food in a spring house, or using a homemade variety of cooler box covered with a damp cloth. Though there are hundreds of thousands of families who have no refrigerator of any description, and thousands of others who still stick to these primitive methods, science has moved on. Today, ice refrigerators are streamlined, more efficient than ever, and refrigerators run by electricity, gas, and kerosene are on the market bidding for consumer favor.

How to choose between them is one of the knotty problems facing a careful consumer.

There are no standards of performance now available to household buyers to help take the guesswork out of choosing this important piece of kitchen equipment. But the buyer who gives heed to several rules in selecting stands a better chance of getting value for the money than one who buys the eeny-meeny-miny-mo way.

YOUR CHOICE DEPENDS, FIRST, ON WHERE you live, and what kind of power is available at the lowest cost. Farm families whose homes are unwired usually must choose between ice, bottled gas, or kerosene refrigerators. City dwellers can often take their pick of ice, gas, or electric refrigerators.

A simple guide for weighing pros and cons of ice versus mechanical refrigerators is the Bureau of Home Economics' list of advantages and disadvantages of ice-cooled refrigerators.

Advantages:

In general, the ice-cooled refrigerator is less expensive to buy than mechanical types. It is easy to install, requiring only some provision for draining. There is little to get out of order and there is no noise. The food does not freeze, nor will it dry out as quickly if left uncovered as it will in mechanical refrigerators.

Disadvantages:

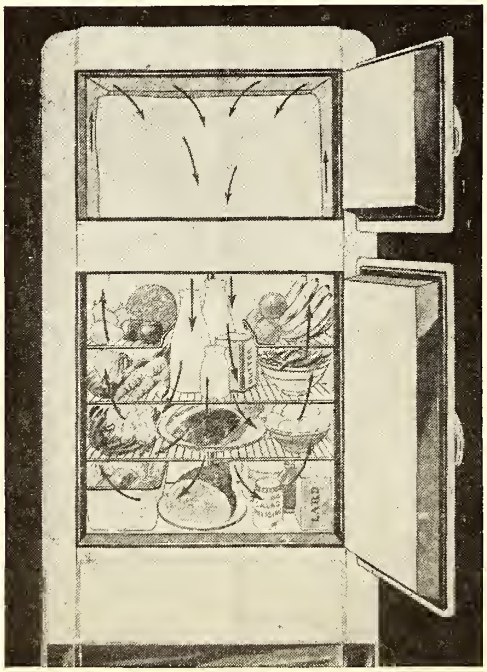
The temperature in ice-cooled boxes is not as a rule as low as in those mechanically cooled. A constant temperature is more difficult to maintain than in the mechanically-cooled refrigerator. It is not always convenient to be at home when the iceman comes. Unless the drain pipe is connected with the outside, drip pans must be remembered and emptied.

Suppose you are the lucky kind of consumer who can choose between all 4 types of boxes, how would you start?

HERE ARE 5 THINGS YOU WANT TO KNOW about any refrigerator: (1) its initial cost; (2) its operating cost; (3) the availability, reliability, and cost of repair service; (4) the cubic contents; (5) temperatures that can be maintained.

Initial costs are the easiest figures to get. They are usually on the label, and every salesman knows them. But initial costs are a long distance from being accurate measures of the dent which a refrigerator will make in your family pocket book. One of the factors that would help you to budget initial costs would be assurance that the box will operate efficiently for this or that many years assuming reasonable care. Such information, like similar assurance regarding automobiles, is hard to get. Many boxes are sold with a guarantee for 5, or maybe more, years. This does not necessarily mean that the box will be uneconomical to run after the guarantee has expired. It may be doing valiant service for you 10 or 15 years hence. You can't be assured of that, however, and no independent tests have been made against which you can measure the life expectancy of any particular refrigerator.

MOST MODERN ICE BOXES are built with the ice compartment at the top. The efficiency of any ice box is dependent on the insulation and on the arrangements made to allow cold air to leave the ice compartment and warm air from the food compartment to return to the ice section.



After initial costs, there are operating expenses. Labels should give you this information, but few do. See if the salesman can supply the data, telling you (1) how much power or ice is required to operate, say a 6 cubic foot box for a month when empty, to maintain certain temperatures; (2) what is the cost of this much power or ice in your neighborhood.

FAILING TO GET THE FACTS ABOUT THE power or ice needed, you might fall back on some rough estimates which the Bureau of Home Economics has made after studying different types of boxes in operation and observing the experience of others. These figures are averages based on a study of 6 cubic foot empty refrigerators operating at a room temperature of 90 degrees and maintaining good refrigerating temperature.

Ice refrigerators of this size will require about 700 pounds of ice a month. Electric refrigerators will use approximately 30 kilowatt hours a month. Kerosene refrigerators will take 15 gallons a month to keep cool. A gas refrigerator will use about 1,800 cubic feet of manufactured gas, or 1,000 cubic feet of natural gas.

Bearing in mind that these are estimates and not invariable yardsticks, you can find out the comparative operating costs of ice, kerosene, gas, and electric refrigerators in

IF LABELS are really informative, they will tell you how much power or ice, depending on the type of refrigerator, is needed to operate the box. Where labels fail to give this information, be sure to ask for it from the salesman, and check against the rough estimates given below.

your neighborhood without going farther than your telephone.

In Washington, D. C., where electricity is comparatively inexpensive, a 6 cubic foot electric refrigerator would cost around 90 cents a month. A refrigerator using manufactured gas would cost $1.40 a month to operate. A kerosene refrigerator would use $1 worth of fuel a month, and an ice box would melt $4.20 worth of ice to keep your food cool for a month.

Having figured the cost of the box and the cost of keeping it operating, next look into the matter of repair service. Since ice boxes have no motors to get out of kilter, you can expect low repair bills for them. Mechanical refrigerators present greater problems. Careful buyers will find out in advance of purchase how available, reliable, and expensive repair service will be. There will come a time when each of these conditions is vitally important in the efficient operation of the equipment. If service is provided free for a certain period, that should be stated in the sales contract. Sales contracts should be read carefully several times so that every detail in them is understood and agreed upon before signatures are put to them.

All costs vary, naturally, with the size of the box and the job you want it to do. Here again the label should tell you what is the cubic contents of each box. If it doesn't, don't guess the figure yourself. Insist on accurate information from the sales person.

You may feel you can judge how much storage space you'll need by looking. But if you're one of the people to whom empty spaces always seem many times bigger than they really are, you can take the expert's word for it that a 5 cubic foot refrigerator is minimum for 2 people, and a family of 4 will need a 6 cubic foot refrigerator. Adding a cubic foot for every 2 members in the family, gives a good basis for judging the size needed.

Use these figures as a starting point. From there on, you have to take your special needs into consideration. If you live within a stone's throw of your grocery store, this space may be sufficient. Your rural friend who has a farm 20 miles out on a country road ought to consider a slightly larger box. Urban families who entertain a lot and farm families who use their family refrigerator to keep their dairy products cool until market time will need more space than the amount which the Bureau of Home Economics recommends for average families.

Next thing to consider is shelf space. Surprising as it may seem, there are variations of as much as 3 square feet in a 6 cubic foot refrigerator. If you have your choice of a 6 cubic foot refrigerator with 14 square feet of shelf space or one with 11 square feet of shelves you will undoubtedly pick the former, other things being equal. Be careful, however, not to get your extra shelf area at the expense of convenience. Though all shelves are at least 4 inches apart, many people require more space between shelves for their storage needs. When buying a refrigerator you should see whether there is enough distance between the shelves for the containers you use, and enough room on the milk shelf for milk and tall beverage bottles.

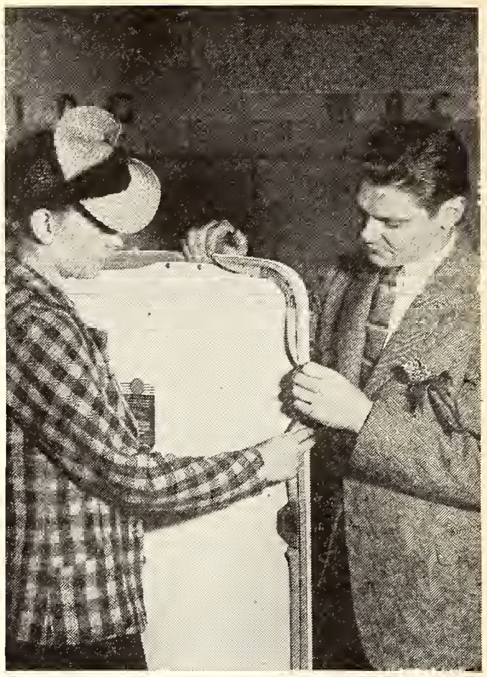
Good insulation is as important in the cheapest ice chest as it is in the most streamlined mechanical refrigerator. Its function is to keep heat from the food chamber. Because insulation is concealed between the refrigerator walls, it's hard for a consumer to find out whether it will do its work well. Best assurance that refrigerators are well insulated is a statement from the dealer or a manufacturer's guarantee that the refrigerator will maintain a temperature of 45 degrees or below in the milk compartment and 50 degrees in the food compartment when the refrigerator is loaded and the room temperature is 90 degrees.

Interior and exterior refrigerator walls are most often made of steel, though an occasional ice refrigerator has outside walls of wood. Since these walls usually form the supporting frame for the refrigerator and encase the insulation itself, they should be sturdy, and as airtight as possible. Steel frames should be securely joined. Wooden frames should be carefully waterproofed to prevent rotting.

Most outside walls are covered with a synthetic enamel which is sprayed and baked on. It is easy to clean, hard to scratch, almost as durable and much less expensive than porcelain. Porcelain interior linings are fairly general. In some ice refrigerators walls are enameled and only floors are porcelain. Porcelain floor finish should extend at least 2

DON'T GUESS about the cubic contents of the box or the area of shelf space. Labels should tell you both, but if they fail to do so ask the salesman. Average city families with 4 members will find a 6 cubic foot box adequate. Shelves should be at least 4 inches apart.

ASK the salesman how much power or ice, as the case may be, it takes to maintain a temperature of 45 degrees in the milk compartment and 50 degrees in the food compartment when the refrigerator is loaded and the room temperature is 90 degrees.



EVERY assurance should be had that the box is constructed so as to keep the cold air in and the warm air of the room out. Rubber gaskets fitted around the edge of the door protect against air leakage.

inches up the walls. All refrigerator floors should be finished in acid-resisting porcelain, but even this finish will stain if acid foods, such as cut lemons, are allowed to remain on it for any length of time.

Doors should be built and fitted for maximum airtightness. They should be as well insulated as the refrigerator walls. Because steel is a conductor of heat, an insulating material such as layers of a hard plastic substance should line the closing surface of the door and the refrigerator opening. Rubber gaskets fitted around the edge of the door are a final protection against warm air leaking into the refrigerator. Hardware should be rust and tarnish-resisting. Hinges should be heavy enough to bear the strain of opening and shutting the door. Latches should catch and release easily when doors are closed or opened, and should be conveniently placed.

WHEN YOU FIND A REFRIGERATOR WITH ALL these provisions for keeping the warm and cold air where each belongs, you've gone most of the way toward getting a refrigerator that will do its job at the lowest possible cost in ice or mechanical power.

The only thing left is to check the efficiency of the refrigerating system, itself, if you're buying a mechanical refrigerator, or the construction of the ice compartment, if you select an ice box.

It's not hard to check on the construction of an ice compartment. The important points are: (1) See that the ice compartment is strong enough to stand the hard treatment it will get when heavy chunks of ice are more or less carelessly dropped inside. (2) See that the lining is rust-resisting. (3) See that adequate arrangements have been made to allow cold air to leave the ice compartment and for warm air to return to the ice compartment from the food compartment; fins or grids protruding from the ice rack help to cool the air. (4) See that the drain is copper, if possible, for slime will not readily cling to this metal. Finally, (5) if a side icer, check the baffle which, baffling as it sounds, is merely the partition separating the ice from food. It should extend from a point approximately 6 inches from the top of the refrigerator to 5 inches from the floor. Its purpose is to direct the flow of cool air around the food chambers.

MECHANICAL REFRIGERATORS ARE DIFFICULT for most women to examine. Their inner workings are often quite mystifying. To get an efficient box, the best bet is to buy from a well-established manufacturer or dealer recommended by people you know. It is wise to take the further precaution, also, of buying a make of refrigerator which has been on the market for some time; there is more chance then that the manufacturer will continue to make parts which you may need for replacement some time later.

Be sure to find out whether the mechanism is open or hermetically sealed. In the case of the open mechanism, it is doubly important that repair service is easily accessible and reliable. With the hermetically sealed kind, there is less chance of a motor going out of order. When it does need repair, the mechanism is removed and sent to the factory for adjustment, a substitute unit being used meanwhile. If you are offered a guarantee covering repairs that may be necessary over a period of years, be sure to read it carefully and note whether it covers the cost of replacement of parts and of the labor required to perform repair service.

NEVER BUY A MECHANICAL BOX WITHOUT seeing and hearing that type in operation. Listen to the motor. Find out how much of the time the motor must run to maintain the desired temperature when the box is full. The general rule is that the motor should be able to do its job operating about one-third of the time.

CONVENIENCES USUALLY ADD TO COSTS. Their value should be weighed against the dollars you have to spend for them. Some conveniences should come with every refrigerator at no additional cost. You should expect shelves that hook firmly and won't tarnish or rattle. Sliding shelves make it easier to store and remove food in deep refrigerators. They should catch when pulled out part way to prevent tipping. All mechanical refrigerators should have a defrosting tray. Corners are rounded to make cleaning easier.

Other conveniences may be had, sometimes at extra charge or in higher priced boxes. In mechanical refrigerators, trays with automatic releases and ice cube releases are important conveniences. Ice cube makers for ice refrigerators is another item. Lights that turn on when you open the door, dishes for food, special "cold storage" meat compartments, shelves which can be arranged to accommodate foods of various sizes and shapes, special dishes and humidifying sections, are luxuries you can have, if you are able to pay for them, in mechanical refrigerators.

EVEN BEFORE YOUR NEW REFRIGERATOR holds its first cake of ice or cools and freezes its first tray of ice cubes, it's time to think about how to use it to best advantage. At this point you'll follow a different track if yours is an ice box than you will if you've bought a mechanical refrigerator.

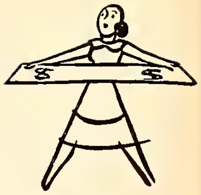
Your ice box should be in the coolest convenient spot, away from the stove, out of the sun, but as close to the walls as you wish. Find out whether your ice compartment should be kept filled to work most effectively. When the ice rests on grids or fins and the air in the food compartments is cooled by contact with the bottom surface of the ice cake or the fins, the compartment does not have to be kept full. Clean the inside of the refrigerator regularly, especially the drain, to keep the refrigerator free of food odors. Lukewarm soda water is recommended for cleaning the interior of the refrigerator, the drain, trap, and dripping pan.

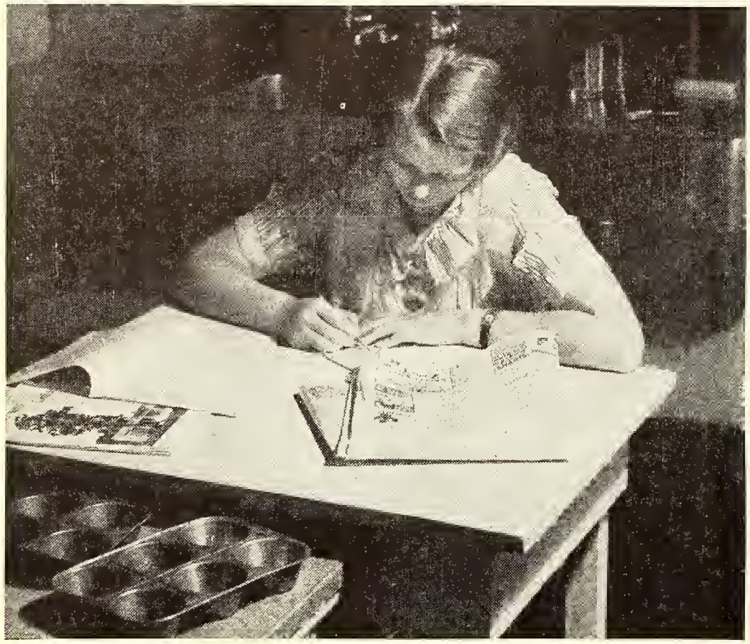
A GAS REFRIGERATOR REQUIRES MORE CAREful installation than an electric one. Space must be allowed for heat from the burning gas to escape. It is best to get advice from the distributor on how to install a mechanical refrigerator so that the heat from the motor and the condenser can escape. If the gas refrigerator is built into the kitchen cabinets, careful venting must be provided. All refrigerators operate more efficiently when they are perfectly level and firmly placed. It has been estimated that fuel consumption of refrigerators placed in the sun or next to a stove may increase 100 percent. Mechanical refrigerators should be defrosted before ice on the coils is 1/4-inch thick in order to cool most efficiently.

WHATEVER kind of refrigerator you have, safeguard your food supply by observing these rules:

Do not overcrowd the refrigerator.
Don't let wrappings on food clutter up an ice box so as to choke off air circulation.
Cool hot food before storing.
Place most perishable foods in coolest spot.
Foods with strong odors—cheese, melons, etc.—should be placed on the warmest shelf where air passes over them just before reaching the cooling unit so that odors will not be picked up by other foods.
Put only clean food in the refrigerator.
Clean refrigerator once a week.

Stretch Your Food Dollar





1. PLAN before you market. Check supplies in your larder and left-overs in your ice box. Let the rules in "Diets to Fit the Family Income," guide you in planning. Make out a list of the foods you will want to buy for the coming week. You can get a free copy from the Department of Agriculture, Washington, D. C.

2. SHOP around to compare prices. Watch the papers for specials. Do as much of your week's shopping at one time as you can so as to save effort and get the benefit of savings from quantity purchases. New York City consumers are luckiest; they have a morning broadcast to tell them what is most abundant on the market.

3. BUY by grade whenever you can. In many cities, it is possible to buy meat, eggs, canned fruits and vegetables, cheese, and butter which have been graded according to U. S. Government standards. Grades help you to get the quality you want and give you the quality you pay for. Look for them on the label or food.

4. WATCH the scales. First look for the seal that shows the scale has been inspected and approved by your weights and measures officials. Be sure the needle is at rest before the food is placed on the scale and that it comes to rest before the food is removed. See that no hand rests on the scale while food is being weighed.

8 easy ways to make your food dollar buy more in nourishing, balanced meals

5. LOOK for the net weight on packaged foods. Compare the cost per ounce of different brands and containers to determine which is cheapest. Be on your guard against off-size packages. Don't buy by the dime's worth; buy by the pound. Look for false bottoms. Remember that you pay for fancy wrappings and trimmings.

6. TAKE home the trimmings. Scraps of meat and fat trimmed off your meat order can be used in different ways. Beet tops are a valuable food; celery tops add flavor to soups. Outer leaves of cabbage and cauliflower contain valuable vitamins. Use them for soup if they are too tough for serving as green vegetables.

7. LEARN how to substitute low-cost for high-cost foods. Many have the same food values. For instance, the lean meat in any cut, grade, or kind of meat has practically the same food values. "Meat Dishes at Low Cost," tells you how to prepare them. Copies cost 5 cents each, from the Superintendent of Documents, Washington, D. C.

8. USE left-overs. Don't throw them away. Here's where ingenuity has a chance to shine. Delicious soups can be made by combining scraps or left-overs. A sauce can transform others. Meat can be ground up and combined with bits of vegetables for a stew. Water in which vegetables have been cooked should be added to soups.

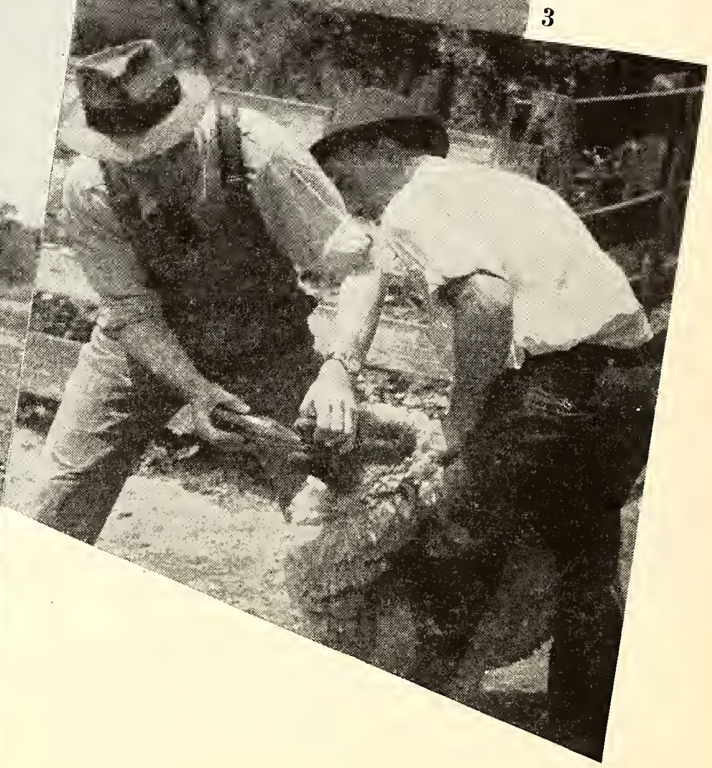
Investing in

FOUNDATION OF GOOD LIVING on the land is well-tended soil and well-balanced farming. Triple A lends a hand to Farmer Gray to help him rebuild the fertility of his soil, adopt new farm practices, and diversify his production so that his more-than-200-year-old Virginia farm can continue to provide a decent living for his family. (1) Fields formerly planted to corn and wheat are now pasture land for beef and milk cattle. (2) This pile of lime, when scattered over Mr. Gray's land, will reduce acidity and restore essential calcium to the soil. (3) This tree sheltered house is where Farmer Gray lives. (4) Land taken out of row crops and planted with clover for grazing is used for sheep. (5) Farmer Gray still plants a third of his farm to crops but the land that is used for them will be rotated with land that is allowed to rest periodically to recover its fertility.

1

2

3



4

5

a Better Living from the Soil

INVESTING IN SOIL

*Farmer Gray's budget book shows how the Government and he are working together to build a more secure and adequate living from the earth**

SOUTH OF WASHINGTON, before you reach the cotton country, or the tobacco country, hundreds of miles east of the corn and wheat belts, on rolling knolled land near a shallow rambling creek called Bull Run, there is a general farm operated by a man named Gray (not his real name, though he is a real farmer).

Mr. Gray isn't a rich farmer, and he isn't a poor farmer. He isn't a sharecropper, a tenant farmer, or a refugee from a dust bowl. He is a middle farmer, if there is such a person, and the kind of farming he does is typical of the region in which he lives.

He grows wheat and corn and barley, grasses, clover and lespedeza. His mare foaled this spring, and the colt, stiff legged, now stands about hip-high. There are quiet grayish sheep grazing in the pastures near the farmhouse and on the lawn in front of the farmhouse. There are pigs grunting in the pen, a flock of eternally ruffled turkeys, chickens, a few cows and a score of beef cattle. There is a kitchen garden and a small orchard.

Mr. gray is one of the 6 million farmers participating in the program of the Triple A. Under the provisions of the Soil Conservation and Domestic Allotment Act of 1938 and its amendments, Mr. Gray is entitled to soil-conservation payments and to benefit payments.

Altogether Mr. Gray's payments for the year 1940 will add up to $146.77.

If you pick this sum of $146.77 apart you can see how the AAA works, what its purpose is, and what the people of the United States get back for their investment in the Gray farm.

The $146.77 figure was computed in the office of the Agricultural Conservation Association of Prince William County where Mr. Gray's farm lies. This association, which administers the farm program, is made up of all the farmers in the program. Its work is administered by a committee elected by and from local farmers.

To get back to the $146.77. That sum breaks down this way:

Soil-building allowance of 70 cents per acre of cropland on 142.3 acres	$99. 61
Wheat-Acreage Adjustment Payment	22. 34
Wheat-Parity Payment	24. 82
Total........	$146. 77

Take the first bookkeeping entry, the $99.61 payment for soil-building practices. This allowance had to be earned, and as Mr. Gray puts it, "When they say earned, they mean earned." To earn the soil-building allowance, farmers must improve the soil on their farms in any one or more of a number of specified ways. The way Mr. Gray chose was to take some of the land he had previously planted to soil-depleting crops—crops that take minerals and nutrients out of the soil and permit the rain and winds to sweep away valuable topsoil—and plant it to soil-building crops such as clover and lespedeza. To do this, Mr. Gray first had to buy seed. In fact, he bought $52.50 worth of seed, but even if he had planted something else he would have had to buy seed. So skip that.

Doing this wasn't enough to earn his soil-building payments. The AAA now requires that a farmer, if he wants to earn soil-building payments, go beyond keeping the land fertile. He must build up the land. It is not enough to restore fertility which has been taken out of the land. He must shift over from soil-depleting crops, and in addition put extra life in the soil. In some cases this means he must fertilize his pastures or turn under green manure crops. In other cases it means he must apply lime and phosphate to the soil. Plants and grasses like clover return nitrogen to the soil, but the soil in producing food and fiber also loses phosphorus and lime which must be restored.

So Mr. Gray went about restoring these essential plant nutrients to his soil. This costs money, and not every farmer is flush enough with cash in springtime to invest in his soil before it has yielded him an income in saleable crops. The Triple A has worked out a plan to outflank farmers' habitual shortage of cash. Lime and phosphates are distributed by the Triple A to soil-building farmers when they need them. Then, the cost of these supplies, considerably under market prices, is deducted from the farmer's Triple-A payment.

Triple A came to Mr. Gray's help, supplying him with 1,000 pounds of superphosphate, valued at $18, and 25 tons of ground limestone, valued at $68.75 more.

Against the soil-building payment of $99.61 toward which he was working, Mr. Gray had a debt of $86.75.

Now, take the second and third items which make up Mr. Gray's Triple-A benefit: the $22.34 wheat adjustment payment, and the $24.82 wheat parity payment.

Before Mr. Gray decided to take part in the AAA program he sowed slightly more than 20.5 acres to wheat. Under the National Farm Program it is necessary at this stage of its development to keep wheat plantings at a level which has been fixed for the entire country. The new emphasis on soil conservation does not stop at planning the number of acres to be planted to wheat. This program requires that farmers go on

---

**This is the last in a series of 4 articles on soil conservation. Previous articles appeared in the April 15, May 1, and May 15, 1940, issues.*

past adjusting their wheat acreage for economic reasons to soil conservation for the national good.

The national wheat plan worked out this year so that Mr. Gray was asked to plant no more than 14.6 acres of wheat instead of his customary 20.5 acres.

As partial compensation for the loss of income from the 6 acres he would otherwise have planted to wheat, Mr. Gray receives what are known as wheat adjustment payments. They are based on the number of acres in his wheat allotment and the number of bushels of wheat usually harvested per acre.

Arithmetic explains the process. Mr. Gray's allotment was 14.6 acres this year under the wheat program. His average production of wheat per acre is 17 bushels. Seventeen bushels times 14.6 gives 248.2 bushels. For each of these bushels Mr. Gray raises as his part in the national wheat program, he receives 9 cents as compensation. That makes $22.34, the wheat adjustment payment.

THIRD PORTION OF MR. GRAY'S CHECK, $24.82, is called a parity-price payment. This payment fluctuates with the price of wheat. When wheat sells for prices which Congress considers fair to farmers there is no price-adjustment payment. When the price of wheat falls to unprofitable low levels, part of the farmer's losses are made up by a parity-price payment for each bushel of wheat raised under the wheat program. The parity-price payment per bushel this year is 10 cents. So Mr. Gray's total parity-price payment is 10 cents times the 248.2 bushels of wheat he will probably raise this year, or $24.82.

You can't depend upon arithmetic to tell how a farm program affects a man and his farm. In fact, it's hard to say what you can depend upon, but it doesn't hurt to talk to the man and look at his farm.

ONCE YOU GET OFF THE MAIN HIGHWAY IN Prince William County, you get on a red clay road. The red clay is either Manassas shale, or Bull Run sandstone, the names soil specialists give to the earth underlying the topsoil in that part of the country.

Mr. Gray's lane runs between tidy wooden fences to a clump of trees topping a slight knoll. From there it leads past a tree-shaded farmhouse to a large barn, and then a tractor shed.

The first time you try to see Mr. Gray, he might be working on the tractor, grease-stained, a wrench in his hand. He's apologetic about the grease on his hands. "A farmer's got to be a mechanic these days," he explains. And then, while he's pleasant and affable, you get the idea that he's busy. He's got to get the tractor repaired so he can finish plowing his cornfield. The rain has set him back. How about tomorrow?

"WE MUST WATCH out lest conservation of our physical resources be pushed with full regard for the loss of dollars flowing off and down our streams, but no primary regard for wasted humanity. It is selfishness that has destroyed our natural resources, and to plead for conservation merely to stop the loss of dollars is to appeal to the same selfishness that wrought the destruction.

"It is only when human beings become the primary objective that conservation becomes the highest national virtue. Conservation can never become our master plan except as a nation's restitution for a great wrong done—not only to land, but to people."—HENRY A. WALLACE, *Secretary of Agriculture.*

The next day you come out, and very likely you're directed toward a hill over on the south side of the farm. In the distance the plowed south field looks like a deep dark brown carpet laid on the sloping hillside. You finally make out the shape of 2 horses pulling something that looks like an old-fashioned buggy. That's a 2-horse corn planter. On top of it there is the lonely figure of a man. That's Mr. Gray.

DOWN IN THE FIELD MR. GRAY GETS OFF HIS perch on the corn planter and looks at the sky when you come up. It's deep blue to the top, so he thinks he has time to talk. While he waits for you to ask a question, he bends down to pick up lumps of soil which he pulverizes in his hands. He volunteers that he likes the feel of good soil.

"Is it good soil?" you ask.

"To tell the truth, it is and it isn't. Grandfather bought this farm back in 1840. He was running a livery stable, a sort of way station for stage coaches. They stopped there to change horses. That was on the old pike to the West. I don't guess you would know how grandfather felt," Mr. Gray explained, "but I know.

"He felt that farming is the only job for a man. So he bought this farm. A hundred years ago this farm had already been worked for a hundred years, maybe more than that."

Mr. Gray waved his hand to indicate the curving land sloping off toward the east. "Wheat, tobacco, and brandy that was made out of apples grown around here used to roll down the valley years ago to docks at Quantico Creek. They loaded that stuff on sailing ships that came up the Potomac River and right up Quantico Creek. Then it went off to England."

MR. GRAY SMILED. "THAT WAS A LONG time ago. You can't do much more than wade in Quantico Creek now.

"Anyway, when grandfather bought this farm it was run-down. First thing he did was to plant it to clover and scatter every kind of fertilizer he could all over it. I don't know what kind he used. Then for a couple of years he didn't do anything but plow that clover under. That built the land up.

"You see," Mr. Gray holding out two hands full of earth so you could see it for yourself, "this soil isn't the rich black soil I hear tell you find out in the Midwest. And it isn't the soil I've seen myself up in the Shenandoah Valley. It's soil you've got to work with and take care of. If you do, you can get crops out of it. If you don't, you can't get anything out of it."

"Has this soil always been taken care of, Mr. Gray?"

"Can't say that it has. Whenever grandfather and father had money to spend, they put fertilizer into the soil. Of course, nobody can do what grandfather did when he took the farm, plough the clover back under. You've got to make a living.

"After the war between the States in reconstruction days the farm ran down badly."

"Wasn't there a battle fought around here?"

MR. GRAY LOOKS ACROSS THE FIELDS thoughtfully. "There sure was. The battle of Bull Run was fought all around here. They tell me a great uncle of mine was wounded at the far end of this farm.

"There's something about this land," Mr. Gray said, "I wouldn't like to leave it."

"But the soil was built up after reconstruction?"

"Oh yes. The next time the land really ran down again was from about 1920 until this Soil-Conservation Program began. Prices were so low we just didn't have the money to buy the seed and fertilizer it needed. You could see the land wearing out."

"And now?"

"Well, I'll tell you. After 4 years of the farm program, I'd say the land has gained a third in production. You can see it. Pastures feed more cattle, and fields give better harvests.

"I know how important soil conservation is. I've seen land wear out. I'll tell you, I'm not so sure about the parity-price payments or wheat-adjustment payments, but I guess I would think differently about that if I really depended on wheat the way farmers out West do. But this soil conservation, all I can say is soil conservation will live a long time in your land.

"It's an investment, that's what it is. And I believe in it. I have to believe in it; this is my land."

BUYING MEAT BY GRADE

[*Concluded from page 5*]

in meat grading, meat buying or selling before they are allowed to apply the Government grade to meat. In addition they must pass satisfactorily a 12-month probationary period. These stiff qualifications are set up to keep the grades as uniform as possible.

Service charge for grading is $2 an hour. This is charged to the packer to make the service self-supporting. On the average, 50 carcasses are graded in an hour. The cost averages about three-hundredths of a cent a pound. That cost of grading is too small to make a difference in the cost of meat to consumers.

Don't confuse the "round purple stamp" of meat inspection with the grade mark. The round purple stamp is required by law to be put on all meat crossing State lines. It is an indication that the meat has been inspected and passed by the U. S. Government, and that it was safe for human food and clean when it left the inspected establishment.

Grade marks appear over and over again on the whole length of any meat carcass, as U. S. Choice, U. S. Good, or whatever the grade might be. You should be able to find the grade mark without any difficulty on all cuts claimed to be Government-graded.

●

CONSUMER TIME ON THE AIR brings you more than an earful of consumer news each week. This cross-country program which is broadcast each Saturday at 10:45 A. M., Eastern Standard Time, in cooperation with the General Federation of Women's Clubs, offers a special consumer bulletin to help listeners remember what they have heard over the air. This radio-print plan has been prompted by demand from listeners who know the value of having source material to which they can refer later and use in their consumer study groups. If your local station does not carry this program, produced by the Consumers' Counsel Division of the Department of Agriculture, write us and we shall be glad to tell you the nearest station which does.

YOUR FOOD SUPPLIES AND COSTS

FOOD COSTS. Retail food costs continued to climb upward slowly from April to May. Costs in general were up one percent. Meats, and fruits and vegetables were the major foods that advanced in price. These increases more than offset reductions in prices of dairy products—only items in which significant decreases occurred.

Compared with last May, food costs are 3 percent higher. However, they are 3 percent below the average level of the past 5 years. Except for last year, costs were the lowest for any May since 1934.

Retail food costs pictured in the chart on this page are the revised index numbers just issued by the Bureau of Labor Statistics and are not comparable with material published in past issues of the *Guide*.

FOOD SUPPLIES. Supplies during the last half of 1940 probably won't be as large as last year. Last year supplies were relatively large, and this reduction does not mean any shortages in food supplies.

Prospective changes in supplies of major foods from 1939 levels follow:

INCREASES: Pork, better grade beef, lard, cheese, evaporated milk, summer oranges.

DECREASES: Lower grade beef, poultry, eggs, canned fruits, dried fruits, fresh fruits (except citrus), canned vegetables, fresh vegetables.

NO CHANGE: Butter, wheat, lamb, total beef supplies, and dried beans.

MELONS. Considerably more watermelons and cantaloups than last July are in prospect. Watermelons generally are most plentiful in July, and cantaloup marketings reach their peak in August.

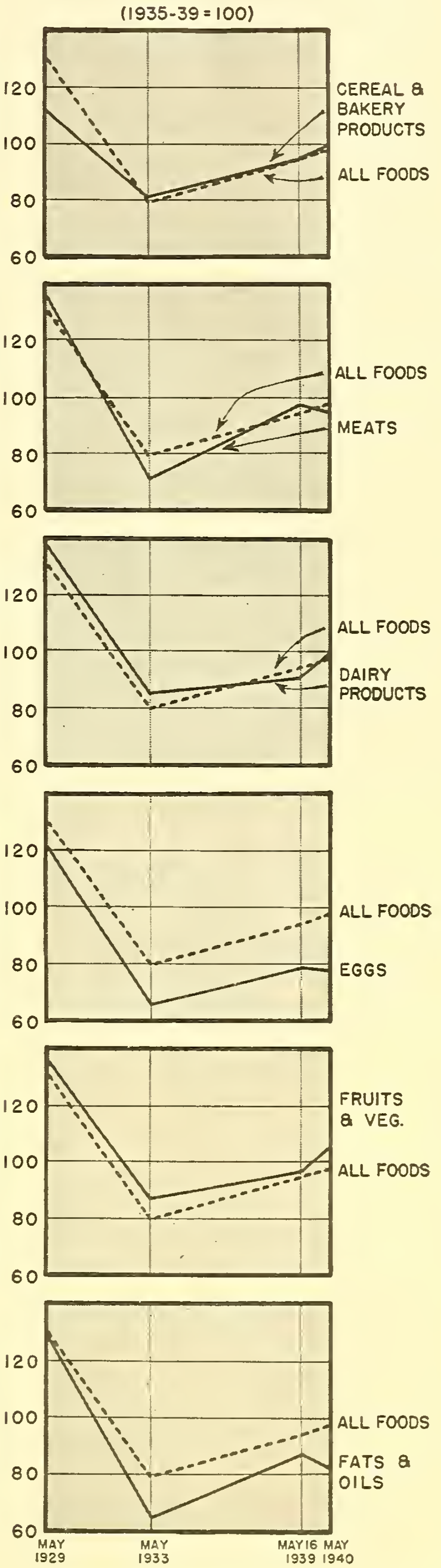
FRUITS. Peaches, apricots, sweet cherries, and grapes probably won't be as plentiful as last summer but larger amounts of summer oranges and sour cherries are expected. Little change from a year ago is in prospect for supplies of pears and California plums.

POULTRY AND EGGS. Most of the reduction in egg supplies from 1939 levels is expected to occur during the latter part of the last half of 1940.

MEATS. Larger amounts of better grade beef, pork, and lamb, but smaller amounts of lower grade beef than last July are in prospect.

DAIRY PRODUCTS. Peak in butter production for 1940 appears to have been reached in June, and seasonal decreases in production are in prospect during the remainder of 1940.

A PERSPECTIVE



IN THIS ISSUE

VOLUME VI, NUMBER 17 ● JUNE 1940

Buying Meat by Grade 3
So You're Buying a Refrigerator . . . 6
Stretch Your Food Dollar 10
Investing in a Better Living from the Soil 12
Your Food Supplies and Costs 15

U. S. GOVERNMENT PRINTING OFFICE 240316°

For sale by the Superintendent of Documents, U. S. Government Printing Office, 5 cents per copy, 50 cents per year, 80 cents, foreign.

5

LIBRARY
RECEIVED
JAN 8 - 1945
U.S. DEPT. OF AGRICULTURE

FURNITURE WOODS

CONSUMERS' GUIDE

JULY 1940

LOCKERS

POISONOUS PLANTS

SOIL SAVING

FOOD SUPPLIES

CONSUMERS' GUIDE

JULY 1940 VOLUME VI, NUMBER 18

A Publication of the
Department of Agriculture
Washington, D. C.
Issued monthly from June through
September; Semi-monthly from
October through May
Prepared by
Consumers' Counsel Division

D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.

PENDULUM SWINGERS are people who go out on one side of a question one week, and then go equally out on the other side of the question the next week.

Pendulum swinging parents a few years back practically held their children's arms while they force-fed them mouths-full of spinach.

Then a professor spoke up and said spinach was not only not broccoli but that it was nonsense. Like lightning, the pendulum swingers streaked to the other extreme. They were against spinach, totally and wholeheartedly.

Truth of the matter is both attitudes held by the pendulum swingers on spinach are wrong.

Nutritionists report that spinach belongs in the diet though there is no reason for a spinach cult. It is a rich source of two important vitamins, A and C; it provides some iron; and it also supplies what's called bulk or roughage.

Spinach has calcium, too, but studies show it is not in a form that can be used by the body. Some people maintain, too, that the iron in spinach cannot be used by the body but the experts differ on this. Some experts say 68 percent of the iron in spinach is absorbed by the body, others say no.

Sum and substance of the matter is properly cooked spinach is a good food and it belongs in a balanced diet.

On the subject of food fallacies, there are solemn voiced people who swear by raw eggs and warn that cooked eggs aren't digestible. Then, there is the skim-milk-is-fattening school of thought, and the black-coffee-is-more-stimulating-than-coffee-with-cream-and-sugar faction. Each is fallacious.

Skim milk, for example, is a boon for people who turn white at the thought of calories. It is low in calorie content but extremely high in food value. It is rich in calcium and phosphorus. It is an excellent source of Vitamin G (riboflavin), and it is a good protein food. Buttermilk has the same qualities, incidentally, and so does dry skim milk.

About black coffee versus light coffee, the experts say that the caffein, which provides the stimulant in coffee, is not affected by sugar or cream.

Then on the question of the raw egg fallacy, the experts report that raw eggs are *not* more digestible than cooked eggs. In fact, it's quite the reverse. Soft, or properly prepared hard-cooked, eggs are more digestible than raw eggs.

CONSUMERS WHO KEEP UP TO DATE DIRECTORIES should forthwith get them out and make these changes in them.

After June 30, 1940, wherever they see Secretary of Agriculture in the Food, Drug, and Cosmetic Act of 1938 they are to read "Administrator, Federal Security Agency." Wherever they see Department of Agriculture they are to read "Federal Security Agency."

Necessity for these new labels arises from the fact that under the Reorganization Act of 1939, the President has transferred the Food and Drug Administration to the Federal Security Agency.

Previously, the Food and Drug Administration was a part of the Department of Agriculture and hence the references to the Department and to the Secretary of Agriculture in the Food, Drug, and Cosmetic Act of 1938.

When the first Food and Drugs Act was passed in 1906, the office responsible for administering it was the Department of Agriculture's Bureau of Chemistry. This Bureau continued to direct activities until 1927. Then a new office was established, the Food, Drug, and Insecticide Administration (still inside the Department of Agriculture). In 1930, it acquired its modern name, Food and Drug Administration.

Now in 1940, it becomes an independent agency with the same name in a new setting, the Federal Security Agency.

MORE BOOKS FOR YOUR CONSUMER BOOKSHELF have come from the Department experts. Please observe carefully the instructions given in each case for ordering copies. No orders should be sent to Consumers' Counsel.

HUMAN NUTRITION. Reprint of Part 1 of the Yearbook of Agriculture, 1939. U. S. Department of Agriculture Yearbook Separate No. 1668. 1940, pp. 97–402. Address: Superintendent of Documents, Washington, D. C. 40 cents. A series of 21 articles on food and nutrition by representatives of various bureaus in the Department.

LIQUEFIED GAS FOR THE HOUSEHOLD, by A. H. Senner and Helen S. Holbrook. U. S. Department of Agriculture Leaflet No. 191. 1939, pp. 8, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents. A description of the sources and uses of liquefied gas, with methods of distribution and measurement. Discusses advantages, costs, convenience, cleanliness and safety of liquefied gas for cooking, water heating, and refrigeration.

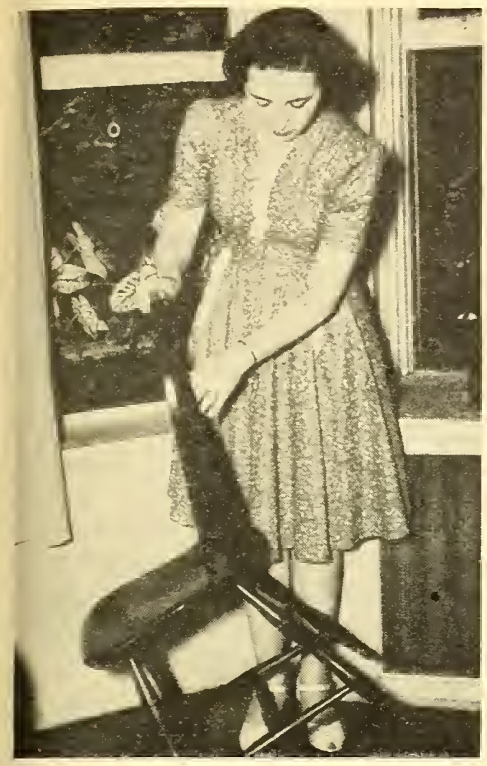
THE STORY OF FARMERS' COOPERATIVES, by R. H. Elsworth. Circular E–23. 1939, pp. 29, illus. Available from: Superintendent of Documents, Washington, D. C. 10 cents. (Single copies may be secured without charge from the Farm Credit Administration, Washington, D. C., as long as the supply lasts.) A brief history of the development of the Farmers' Cooperatives from 1810 to the present day. Describes the rise of the Grange movement and its influence on modern cooperatives, and discusses types and present trends of the farmer-cooperative movement.

THE WHOLESALE FRUIT AND VEGETABLE MARKETS OF NEW YORK CITY, by William C. Crow, W. T. Calhoun, and J. W. Park. 1940, pp. 123, illus. Address: Superintendent of Documents, Washington, D. C. 25 cents. A special report by the Bureau of Agricultural Economics and the Agricultural Marketing Service of the U. S. Department of Agriculture, pointing out ways of reducing the cost of distributing fresh fruits and vegetables in New York City through more efficient marketing facilities. Discusses the present marketing system and methods of improving it.

PROXIMATE COMPOSITION OF AMERICAN FOOD MATERIALS, by Charlotte Chatfield and Georgian Adams, Bureau of Home Economics, U. S. Department of Agriculture Circular No. 549. 1940, pp. 91. Address: U. S. Superintendent of Documents, Washington, D. C. 15 cents.

What Kind of Wood Do You Want?

Experts in the Forest Service have tested and examined furniture woods to get at facts that will be useful to consumers when they go to market for pieces that will give them value for their dollars



GET OFF that chair you're sitting on! Now shove it over under the light or next to the window. Examine its wooden surfaces closely. Do the same with the kitchen table. Try it again with your telephone table.

Notice any difference? Chances are the kitchen table has a rough, heavy surface. The chair and telephone table are smoother to the touch. They probably are highly polished with a richer "grain" (or figure) than the sturdier kitchen table.

If you observe closely you may find that the top of the telephone table is not exactly similar in grain and appearance to the legs, or to the interior of the drawers. Possibly the drawer fronts have a much richer tone than the rest of the piece. Similar differences will be found in other furniture pieces that you put through close examination.

More than 50 different woods go into the furniture that consumers buy. A piece of furniture called "walnut" may have drawer sides of sycamore, underpinning of sweet gum, and reinforcements of cottonwood. Or a bureau called "mahogany" may be mahogany only on the surface, with 4 or 5 different woods built into the frame or into the plywood, the face veneer of which is mahogany.

For a consumer to spot all the kinds of wood in furniture would require being a wood expert, or taking hand saw, chisel, and microscope with him when he goes to buy.

Simpler—and a lot safer—would be informative labels on furniture.

What consumers want to know about a piece of furniture is this:

(1) Kinds of wood, on the surface, underneath, and in the framework of the furniture. Then the consumer would not be fooled into thinking he is getting a high grade mahogany or walnut in a piece *stained* to resemble mahogany or walnut.

(2) Whether the wood is plywood or of solid construction. More about this later.

(3) Hardness of the wood. Wood testing laboratories have evolved reliable, scientific tests for determining the hardness and strength properties of different woods. The Government relies on these tests in setting up its own specifications when it buys wood products. Using these same standards for setting up quality grades for wood hardness would go a long way toward getting the consumer "out of the woods" when he buys furniture.

(4) Resistance of wood to shrinking, warping, swelling. Wood experts have known for a long time that most woods of a high moisture content are likely to warp, swell, or shrink with changes in atmospheric conditions. The same is true of wood that has been improperly dried. From that information it has been possible for scientists to set up minimum standards covering the proper moisture content of wood for different regions of the country.

(5) Strength of plywood and resistance to failure at the glue joint. Furniture makers already use standard tests for determining plywood strength. On the label, the information would go a long way toward telling the consumer how well the plywood might be expected to serve him.

(6) Finish of the wood. An oil finish, although expensive, is especially well suited to table or bureau tops, for it is less likely to be discolored by a hot plate or a wet glass. If the finish is shellac or varnish, it may be discolored if a hot dish or wet glass is placed on it. When such discoloration takes place the entire surface may have to be refinished. With an oil or wax finish the damage can be easily repaired.

A label on a mahogany desk, providing such information might look like this, for example:

Wood: Mahogany face veneer with crossbanding and core of other woods. Drawer sides of sycamore and hidden parts of woods suitable for the purpose.

Hardness: Top and sides: A. Will not dent easily. Takes high polish.

Resistance to shrinkage, warping, and swelling: This wood has a 6 percent moisture content when made into furniture. In temperate climates it rates: A. This means atmospheric change will not affect it seriously.

Strength of plywood: B.

Lacking such labels today, you have to trust to the sales clerk if you want to know what furniture is made of. Nub of the matter is that no forest trail was ever more difficult to follow than the consumer road to identifying quality in furniture woods. In a literal sense the problem often reduces itself to not being able to see the wood for the furniture.

Generally, a good furniture wood should possess these qualities: It should be hard and strong enough to resist normal stresses and strains, yet soft enough so that nails and screws won't split it; resistant to denting under ordinary use; an attractive figure; able to take stain without spoiling its natural appearance; resistant to warping, swelling, and shrinking.

Probably no wood is that perfect. But on page 5 we list the woods most commonly found in furniture and what you can expect of them both in appearance and in measuring up to this ideal standard.

All woods tend to shrink and expand with changes in the moisture conditions. Paint, varnish, and enamel slow up the process, but do not prevent it. A piece varnished on top but not on the bottom may warp because of

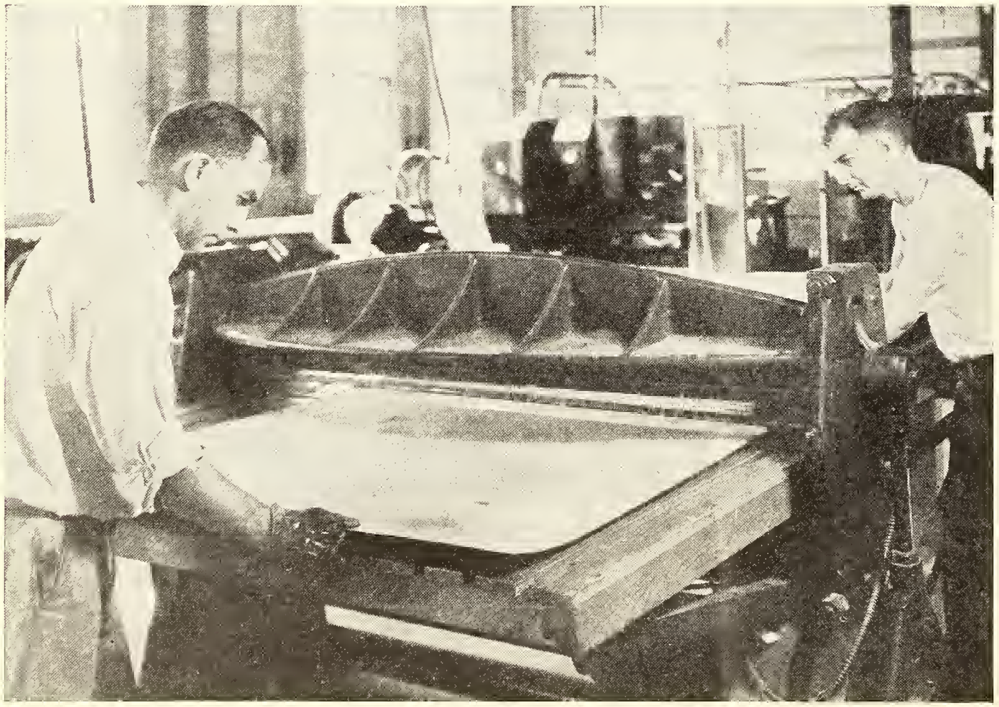
unequal absorption of moisture. One rule, then, is to look at all the wood surfaces—top and bottom, front and back—to be sure they are finished equally well all around.

Actually, seasoning of wood before it is made into furniture is the best prevention against warping. Any wood, properly seasoned, will resist swelling and warping regardless of the tree it came from. Just looking at furniture will not tell whether the wood has been seasoned; information on the label would solve the problem.

Plywood construction—often called veneered construction—is used in all types of furniture. It is made this way: Thin sheets of a wood of attractive design, properly seasoned are glued onto a core of another kind of wood, also well seasoned but not of an outstanding design. One or more layers of the veneer may be glued onto the core to form the finished panel, depending upon the final thickness desired. When 5 thicknesses of veneer are used it is called a 5-ply stock. The center sheet is known as the "core." The sheets on either side of the core are called "crossbands" and the grain of these is at right angles to the grain of the core. The outer plys of veneer are called "faces," and the grain of these plys runs at right angles to the grain of the crossbands. Some plywood, such as that used for table, desk, and bureau tops, employs solid wood strips glued together edge to edge for cores to which crossbands and face veneers are applied in the same manner as for plywood made entirely of thin veneer. But always the same number of layers are glued to one side of the core as to the other. In rare cases, face veneer of one kind may be used on one side of a panel and a different kind on the other side. Such stock is used for furniture panels and all 4 edges are held firmly in place in grooves, thus eliminating any chance of warping.

All things considered, good plywood construction is better than solid wood construction, especially on wide surfaces. If the veneer used in its manufacture is properly dried, correctly and efficiently joined together with high grade glue, it is as strong as solid wood and has greater resistance to warping. It does not split easily, suffers less from changes in moisture content. Tendency of some woods to "check"—or to develop minute crevices on the surface when the wood dries out—is resisted by plywood construction. Plywood is more economical since woods that are valuable and expensive—such as mahogany—can be used in small quantities and still display their outstanding beauty. The cores and crossbands can be made of the cheaper, softer, lighter woods. Veneers make possible beautiful symmetry and design.

WITH micrometer precision, logs are sliced razor-thin, to be made into veneers, which in turn are glued together to make plywood. Sometimes stronger than solid boards and more resistant to warping and splitting, plywood also has the asset of being economical.



Solid construction likewise has its advantages and disadvantages. It is not as well balanced in strength as plywood, is more likely to warp or swell. It may be more expensive if costly wood is used throughout the piece. On its asset side are these considerations: Solid wood can be carved easily, making possible construction of expensive, intricately designed pieces. If the surface is chipped or injured, you can have the piece sandpapered down and refinished at moderate cost. Such furniture is often heavier and more substantial.

When you are marketing for furniture of a particular kind of wood be sure you don't confuse the type of finish with the wood itself. Sometimes articles are labeled as "mahogany finish" or "walnut finish." This means a cheaper wood with an imitation finish to resemble the grain of the wood named.

Today's labeling practices also may lead to another misunderstanding by consumers. Veneered furniture may be called "solid mahogany," "solid maple," "solid walnut," as the case may be. "Solid" in these cases usually means that the wood on the surface is the real thing, not a stained imitation. Always ask if the wood is solid all the way through before concluding that the label means what you think it means.

When you select furniture, decide what sort of treatment it is going to get, then judge the wood. If you want a show piece, then a wood of attractive color and grain is desirable. If you want a piece that will be durable and stand up under heavy usage, then select one rating high in hardness and other strength properties.

Most often, high priced dining room, living room, and bedroom furniture will be of solid or plywood mahogany, walnut, maple, or oak.

In the medium price range you will usually find other woods stained to resemble those in the high price brackets. But construction of such furniture may be just as good as the more expensive.

In the lowest priced group will be found kitchen furniture and pieces "in the white," which means furniture that is merely sanded but not stained or finished. Look these pieces over carefully. Be sure they are solidly made, and that the wood is free from imperfections.

We give you some facts about woods to help you in selecting the quality you want in the table on page 5. They are based on studies of Department of Agriculture scientists.

Behind the "ABC" ratings of the different woods are years of research by the Forest Products Laboratory of the Forest Service, U. S. Department of Agriculture. Over a million tests have been made to determine the mechanical properties of most of the woods native to the United States as well as many foreign woods. Results of the tests are set down as exact values, which are used by producers and users of lumber and timber in various forms as standards upon which to base their specifications. Today wood-using industries use these standards in placing their orders for lumber. For them it takes the hit-or-miss guesswork out of buying. Consumers who want to know what they are getting have no such yardsticks. Based on the vast number of mechanical tests conducted by the Forest Products Laboratory, the scientists of that institution have set up the ratings of A-B-C shown in the chart, each of which covers a range of values for each property of the different woods.

GRADES AND DESCRIPTIVE TERMS HAVE these meanings:

Hardness: Property of resisting dents, scratches, and cuts. The harder the wood, the easier it will polish and the better it will wear. But it is more likely to split in nailing unless workmanship is of high standard.

Resistance to Shrinkage and Swelling: This indicates the general tendency of the wood to resist shrinking or swelling with changes in moisture content. But, remember two-thirds of resistance of a wood to shrinking or swelling is in the way it was seasoned.

Resistance to Warping: Again dependent to a large extent on the seasoning of the wood. If the wood is "quarter-sawed" it will be less likely to warp.

Amount of Figure: Class A woods might be too heavily figured for some purposes. Class B woods have a more modulated figure, while Class C woods are almost lacking in a figure on the surface. Figure is much more pronounced in veneered furniture than that made of solid wood.

Bending Strength: A measure of the load-carrying capacity of the wood. Particularly important when considering wood for reinforcements, chair backs, and cross-bar supports.

Class A: Woods that are relatively high in property or characteristic listed.

Class B: Woods intermediate in property or characteristic listed.

Class C: Woods relatively low in property or characteristic listed.

Wood	Hardness	Resistance to Shrinkage and Swelling	Resistance to Warping	Amount of Grain	Bending Strength	Where Used	Color
Red Gum......	B	C	C	B	B	Legs, posts, frames. "Inside" construction. Sometimes, veneer.	Pinkish to reddish brown.
Oak..........	A	C	B	A	A	Bedroom and dining room, usually in solid pieces, but abundance and finish suit it for practically all furniture.	Grayish brown sometimes with reddish tinge.
Yellow Poplar.	C	B	A	B	B	Veneer cores, solid parts of kitchen furniture, cabinets, frames of upholstered pieces.	Light yellow to mellow brown.
Birch.........	A	C	B	B	A	Used where strength is needed, such as frames for chairs. Also drawers, slides, partitions, plywood, and veneers.	Light reddish brown, taking stains well.
Maple.........	A	Hard: C Soft: B	B	B	Hard: A Soft: C	Mostly as a solid wood in natural finish decorative bedroom and dining room suites; sometimes in living room pieces, and for furniture where strength is a chief requirement. Hard maple stronger than soft maple.	White to light reddish brown.
Tupelo........	A	B	C	C	B	Legs, frames, and hidden parts of upholstered pieces. Also for kitchen furniture.	White to grayish brown.
Chestnut......	B	C	A	A	C	Some types of bedroom, dining room, and occasional pieces, particularly tables. Outdoor furniture. Often used as core wood.	Grayish brown.
Red Alder.....	Rated between red gum and yellow poplar.					Table tops, dresser tops, side and drawer fronts, kitchen furniture, and solid parts of household furniture generally. May be stained in imitation of mahogany or walnut.	Pale pink brown to white.
Walnut........	A	B	A	B	A	Used in all kinds of furniture, both as veneer and a solid wood. Its beauty and excellent wearing and machining qualities rank it near the top.	Light to dark chocolate brown with characteristic dark streaks running through the grain.
Mahogany.....	Rated equally with walnut.....					Used both as a solid wood and a veneer in high-priced furniture. Certain Philippine hardwoods, called "Philippine Mahogany," are not a true mahogany.	Varies from pale to deep reddish brown the color taking on a richer hue with exposure to light.
Cottonwood...	C	C	C	C	C	Used as plywood and in the form of solid wood for concealed parts of high grade furniture, and exposed parts of kitchen furniture.	Grayish white to light brown.
Ash, White....	A	B	B	A	A	Found occasionally in moderate priced tables, dressers, wardrobes, etc., drawer sides and backs and in frames.	Light grayish brown to reddish brown.
Ash, Black	A	C	B	A	B		

Below Zero

A half million farm families this winter are going to have the fun of eating their own home-grown, quick-frozen foods because cold storage lockers have come their way.

SIXTEEN YEARS AGO, when a Frederick County farmer's wife was planning several days' meals for her harvest crew, she laid in a 36-pound supply of fresh beef. At the end of the first day, the meat was gone. Sixteen hungry threshers who had not tasted fresh beef for months had "licked the platter clean." Today she feeds the harvesters with meat from her own farm, frozen and stored in her cold storage locker. As a result harvest meals cost much less.

The pennies and even dollars lopped off the cost of store-bought meats by cold storage lockers is one reason why these lockers have come to be an important new feature of the farm family's food supply. Farm women like the relief they bring from the drudgery of home preserving foods. Big and little members of the family smack their lips over the deliciousness of fresh foods eaten out of season, and boost the lockers that make that treat possible.

Mushrooming up on the landscape at the rate of 500 or more new locker plants yearly, they number now well over 2,500, and provide sub-freezing, often sub-zero, storage of food for over a half million farm families.

LOCKERS

Barely 20 years ago, cold storage lockers were nothing more than a playful idea in the minds of some Washington hunters who prevailed upon an ice-plant manager friend to preserve their quarry. He froze the game and held it until the hunters could consume it. Game freezing proved so successful, the idea of cold storage lockers for farm-slaughtered meat popped up in somebody's mind. Some farmers took a chance on it. They carried their meat to the ice plant where it was prepared for storage. From the safe recesses of their lockers, the families withdrew what they needed from time to time.

Washington farmers couldn't keep their idea to themselves. News of it, however, spread around slowly. In 1930, there were barely 100 plants concentrated in the far west. By 1937, cold storage lockers were more common in the West, but so rare in the Middle West that the average farmer would have to be told what they were. Since then their growth has shot up like a boy in his teens, though even now the East Coast boasts but few.

Explanation for the sudden spurt in growth is threefold. (1) Rural electrification has been vastly extended: 8 percent of the Nation's farms had power from central stations in 1929; 22 percent were getting it in 1939. Cold storage lockers depend on the availability of electric power supply. (2) Cold storage equipment has been developed with automatic controls which make it easy to run and economically feasible for small plants. (3) Farmers who want better meat for the money they have to spend are hearing about locker plants, and refrigerating equipment manufacturers are seeing to it that they do, with sales campaigns designed to reach everyone from city dwellers to village meat markets, taking in farmers on the way.

If you want to decide just how much sense cold storage lockers make, you have to know what they do, how much they cost, and what return if any they bring their users. A look at the lockers themselves helps to answer these questions.

Maryland's Frederick county farms are rich and ample, rolling out from the historic county seat in all directions.

To serve these farms' families, a cold storage locker plant opened up last winter in the city of Frederick. The idea had been simmering for years. At one time, a local grain and feed co-op had considered building a plant. When private enterprisers stepped in, the cooperators decided to spend their money for something else. Since opening in February, 150 of its lockers have been rented at $1 a month. So far they have been used mostly for storage of meat. Recently some fruits and vegetables have been frozen. In addition to keeping lockered food at sub-zero temperature, the compact and streamlined plant is built to perform all the other functions of a baby-sized packing plant. Following a farmer customer's product right through the plant is the best way for outsiders to see how it works.

Before the locker plant opened in February, Jim Mason sold his calves young, got about $5 a head for them. That, said Mason, hardly made it worthwhile raising them. What hurt more was the price he had to pay when he wanted a taste of veal at his meals. Now, Mason kills his own calves, eats his own veal. Sometimes he does the slaughtering. When he wants the plant to do it for him, he gives them a ring. The butcher covers the 10 miles to Mason's farm, does the slaughtering, all for $1.25 a head. There's no charge for mileage nor time spent in traveling. Then the carcass goes to the plant. Hung in the cooler, it chills properly at a temperature of 34 to 36 degrees above zero.

Next step in the game is cutting and wrapping. The butcher is expert. He cuts the veal into cutlets, roasts, chops, whatever fits the family's needs and orders. Then he wraps the pieces in moisture proof paper, stamps them for identification and date, plunges them into a sharp freeze room where temperatures of 25 to 28 degrees below zero soon freeze the meat as stiff as a board. A few hours of this kind of treatment makes the meat ready for locker storage at near zero temperature.

HOURS of tedious toil spent in canning or curing foods against winter needs shrink to minutes for farm families lucky enough to have cold storage locker plants at hand where foods can be processed and stored in safety.

OUT of immaculately clean storage lockers come bundles of quick frozen foods, each carefully labeled to show its contents. Home-grown foods, preserved this way, often cost the farm family less than the same foods sold at retail.

Mason has a key to his locker. When he goes to Frederick to buy feed from the Co-op, a block away, or to the dairy next door, he stops at the locker plant for meat to last his family till his next trip. Mason finds the cut he wants by reading the stamps on packages. The piece is wrapped in heavy paper for him to carry home. Once home, it can be kept in the electric refrigerator, directly under the coils, where it will stay frozen for several days until the family is ready to eat it.

If Mason puts 500 pounds of meat through his locker each year, storage costs will be slightly over 2 cents a pound. To this cost he must add the $1.25 a head for slaughtering. For chilling, aging, cutting, wrapping, weighing, labeling, sharp freezing, and storing, he will pay an additional 1½ cents a pound. Other plants may charge ½ cent more or less for these services. For meat ground to make meat loaf he pays an extra 1 cent a pound, which is average, though some plants charge only ½ cent. These charges, added to the cash farm price for calves which Mason foregoes by consuming instead of selling his animals, still leave the costs of his meat below the price of similar meat bought at retail markets.

Meats have been the major food stored in lockers. Properly frozen meat tastes like fresh. Most farmers usually have at least one hog to kill, and few farms are without chickens. Preparing chickens for storage usually costs 10 cents, geese 22 cents, ducks 17 cents, turkeys 20 cents, according to the Farm Credit Administration. Frederick's slaughtering charges are higher than those the FCA reports as average. Typical charges for slaughtering in plants studied by FCA are: cattle, $1.50 to $2.00; sheep, 75 cents to $1.00; hogs, $1.00 to $1.50.

Fresh frozen fruits and vegetables the year round border on luxury for most farmers. Compared with the long hard job of home canning, the cold storage method of preserving is as simple for the housewife as waving a magic wand. Only requirement is to deliver vegetables or fruit to the plant. Next step as far as the family is concerned comes when it wants fresh strawberries in December. Taken from the locker, thawed and served for supper, they taste like commercially frozen varieties, and are almost the same as the crushed and sweetened berries American housewives pour over their shortcakes in summer.

Few will deny the superior flavor of the stored berries over home-canned ones, but farm families must pay well for this taste treat. In Frederick, processing and freezing a dozen quart boxes costs $1.96 or over 16 cents a quart. However, this cost can be cut if housewives process the berries themselves and leave to the plant only the simple job of sharp freezing and storage. Most fruits and vegetables must be cleaned and prepared as if for cooking before they can be stored. Strawberries must be washed, capped, mixed with sugar. Final step is wrapping in moisture proof paper, sealing in waxed cardboard carton. Doing this work herself, a housewife can economize. If she uses her own airtight glass or lacquered tin containers, her only cost will be the investment in containers, the freezing charge, averaging 2 cents a quart throughout the country, and the storage rental charge.

Time is not ripe for a final balancing of the pros and cons of locker plants. But experience of the past decade has highlighted some factors which potential plant builders and users might mull in their minds before building or signing contracts for use. On the asset side of storage lockers are: (1) Foods preserved in lockers resemble fresh foods in flavor. (2) Hard work of home canning can be blacked out. (3) Butchering can be done throughout the year, instead of all at once. (4) There is less waste from food spoilage and poor amateur butchering. (5) Improved year-round diets are made possible.

Farmers who store their own meat can count on having a fresh year-round supply from their lockers at around the wholesale cost of meat. Since the retail mark-up on meat runs from 6 to 10 cents a pound, farmers who formerly bought their meat at retail save by using the cold-storage locker.

On the debit side are the following possible drawbacks: (1) It may be troublesome to collect the food from town when needed. (2) If you haven't an ample electric refrigerator, foods have to be consumed soon after you take them from your locker. (3) You may pay more to freeze and store your food than it would cost to can or cure them at home.

The 250 co-op locker plants—10 percent of the country's total—which are owned and operated by their users illustrate two things: (1) Co-op plants are hard to get started, (2) Once started they work well if management is good.

All co-op ventures take time to get started because the cooperative idea is new to many people. Starting a co-op locker plant has the added difficulty of convincing people that freezing and storing their own food has its advantages. Farmers like to see freezing work first before they try it. However, co-op plants stand a good chance of succeeding. To raise funds, they must secure members who buy shares in the plant. Once members buy shares, the co-op has good assurance that they'll patronize the plant to make it a go, and safeguard their own investment. In addition, the organization and education necessary to secure members is the best guarantee that farmers will know the benefits to be gained from cold storage lockers, and spread the news widely among their neighbors. Educational campaigns for privately owned plants are important for success, too.

THE FARM CREDIT ADMINISTRATION OF THE U. S. Department of Agriculture has lent a hand to beginning cooperative locker plants. This lending agency through its Banks for Cooperatives has on record 78 thousand dollars outstanding loans to 11 plants. This figure does not cover loans made to co-ops setting up plants in connection with already operating co-op business.

COLD STORAGE LOCKER CO-OPS CAN'T BE ESTABLISHED over night. Needs of the prospective users must be surveyed and considered. Plants in nearby communities should be visited and studied. A 6-months' organization and education period should be allowed to give starters a chance to see what possibilities and difficulties are. Not until prospective members know how a cooperative functions is it time to decide on specific plans for a locker co-op.

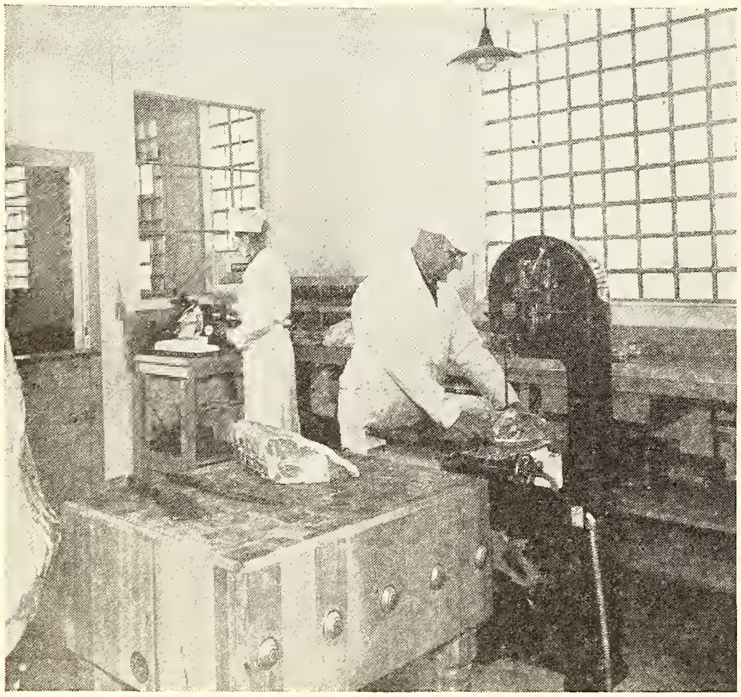
Most plants, according to FCA observers, are those organized in connection with another business—a creamery or poultry produce plant, for instance. Such co-ops start ahead of the game, with members already lined up and lower overhead expenses.

Detailed costs can be secured from the Farm Credit Administration, but organizers can count on paying at least $25, maybe as much as $40 to build each locker. Taking an average of $37.50 a locker, a 300-locker plant would cost $11,250. In addition, a locker plant must have on hand reserves to cover operating costs which would run around $3,000 a year for a plant of this size. If rental agreements are signed when shares are sold, these reserves need not be so high. Shares should be sold to cover 40 to 55 percent of the initial investment. The Banks for Cooperatives may not lend co-ops more than 60 percent of the appraised value of the security offered. That means that farmers building a locker plant valued at $11,250 could not borrow more than 60 percent or $6,750 from the Banks for Cooperatives. A survey of 12 locker co-ops in the St. Louis area borrowing from the St. Louis Bank for Cooperatives shows that in practice cooperators put up all but 33 percent of the needed funds themselves, supplying 67 of every 100 dollars needed.

COOPERATIVES, NOW OPERATING, CHARGE their members at the same rate as private concerns. Locker rentals run from $10 to $12 per year, usually. Charges for processing fit in with the typical charges listed earlier.

Farm families who want more information on how lockers can serve them and how to explore the possibilities of cooperatively owned plants can write to the Farm Credit Administration, the Bureau of Animal Industry, and the Extension Service of the Department of Agriculture in Washington.

TWO STAGES mark the initiation of foods into cold storage. First, they must be cleaned, prepared, and wrapped for storing. In the room to the left, a locker employee is using a power saw to cut up meat. Expert cutting eliminates wastefulness which sometimes characterizes amateur cutting on the farm . . . In the room to the right, the bundles of meat, placed in baskets, linger awhile in a temperature about 32 degrees below zero. After this quick freezing, the packages are ready for long time cold storage in lockers.



Pointers on Poisonous Plants

Smart vacationers learn how to avoid trouble-making leaves, stems, berries, and roots

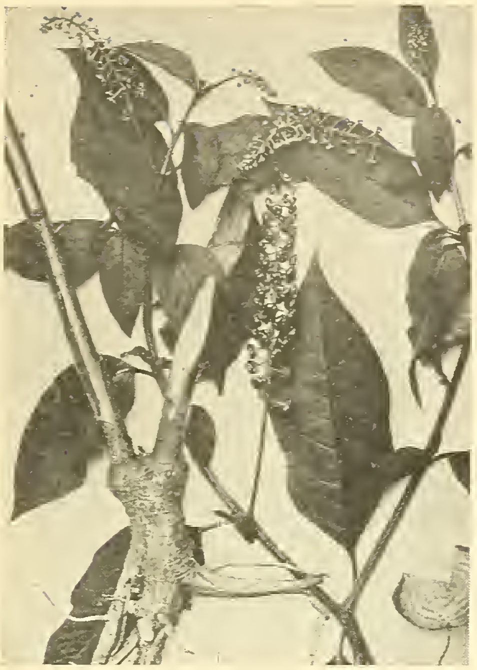
AMERICA HAS hundreds of plant growths that in one way or another may be poisonous. Fortunately for the vacationist, most of them rarely cause trouble for the very good reason that they either are not widespread or are not likely to be touched or eaten. A few poisonous plants, however, in addition to being widely distributed, are common enough to represent definite hazards. Eighty percent of all cases of summer poisoning are caused by poison oak, poison ivy, and poison sumac. Here are 3 rules for a safer summer:

(1) Consult a doctor immediately if you develop any suspicious rashes or irritations after being in the country.

(2) Consult a doctor immediately if you feel any ill effects from eating berries, herbs, and other growths that may have been poisonous.

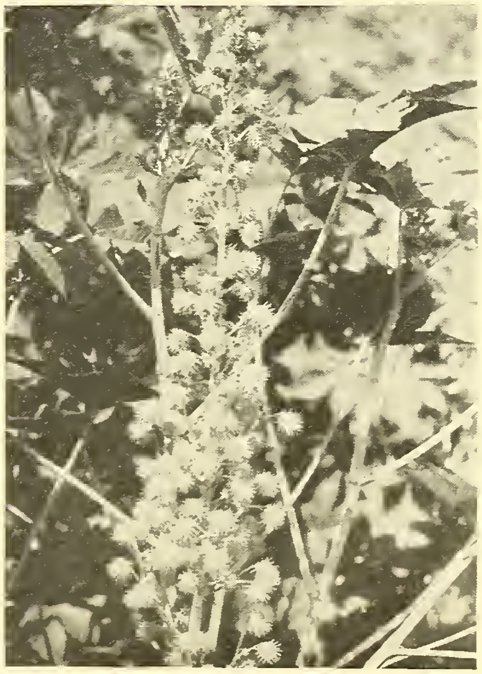
(3) Avoid contact with all plants you know or suspect to be poisonous, and never eat any part of any plant which you do not definitely know to be a food plant.

Dont eat!

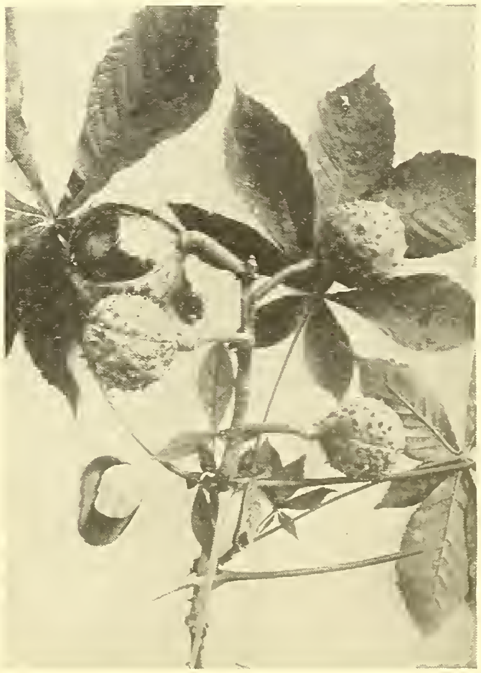


POKEWEED: So long as only the greens are eaten, it is harmless. But roots and seeds are poisonous, can result in severe illness and death. Has simple leaves growing alternately on the stem, which is purplish in color. Bears a large fleshy berry containing black seeds. Be sure to cook young shoots thoroughly before eating. Don't use the cooking water. Call doctor immediately if roots or seeds of the plant have been eaten.

CHINA BERRY: Sometimes called China-tree, Pride of India, Indian-lilac, and white-cedar. Grows on a tree widely used for shade and ornamental purposes, particularly in the South. Yields cluster of tiny blue flowers and smooth yellow berries. Warn children particularly against eating berries or chewing leaves or bark of the tree.

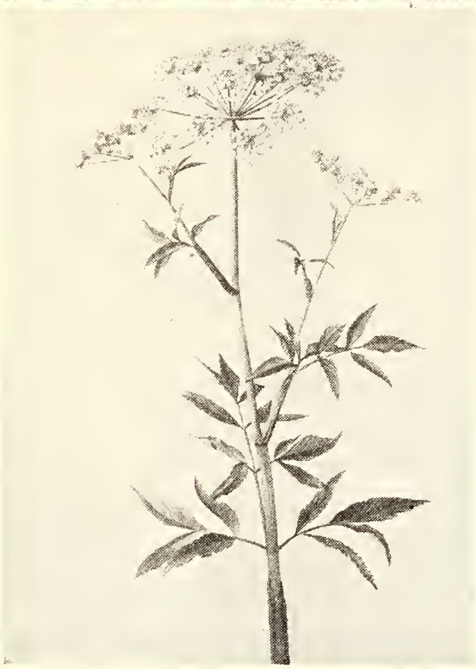


CASTOR BEAN: Also known as castor oil plant. Grows to about 9 feet high. Bears spiny capsules each containing a black, gray, brown, or variegated seed. Is widely grown in milder regions for the valuable bean from which castor oil is made. All parts of the plant, particularly the bean, are poisonous when eaten in natural state.

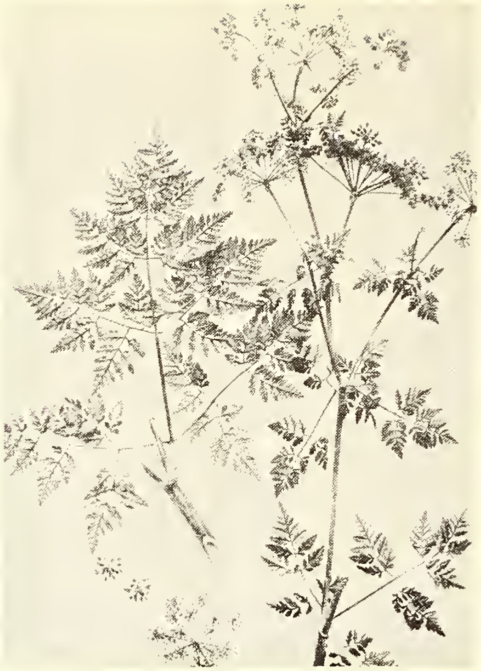


HORSE CHESTNUT: Many different varieties, both trees and shrubs, found in all parts of the country. The large nutlike seeds may be mistaken for real chestnuts and can result in poisoning. Again, since the plant is so common, children should be warned against eating the nuts which cause mild poisoning. They are covered with a shiny brown skin.

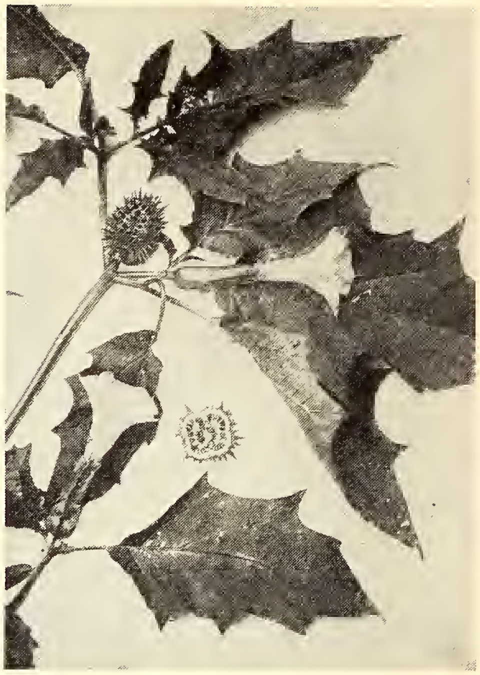
Dont eat!



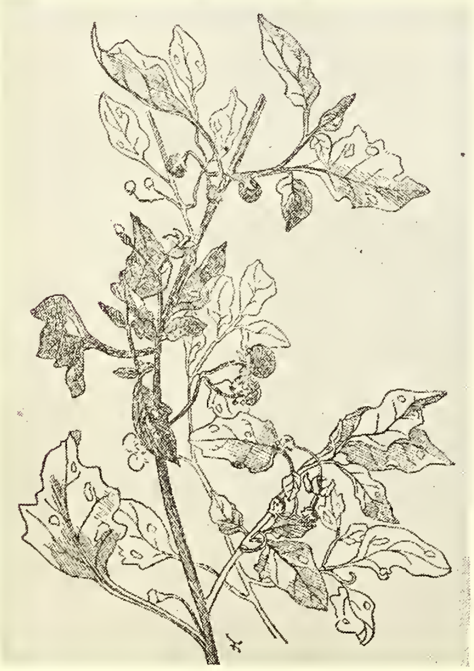
WATER HEMLOCK: An extremely poisonous plant whose roots have at times been eaten with fatal results through being confused with parsnips, artichokes, or other roots. Grows to about 6 feet high and bears small white flowers. If you cut the root lengthwise, droplets of a yellowish oil which has a peculiar odor exude. Grows principally in wet meadows and pastures, and along ditches and streams.



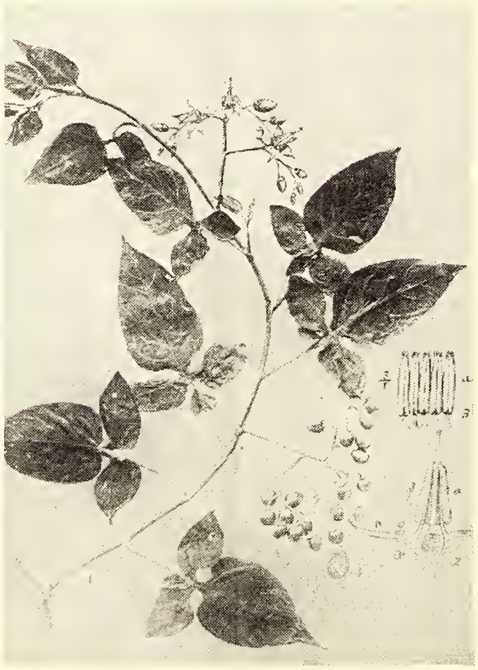
POISON HEMLOCK: Another variety of hemlock with smooth, purple-spotted, hollow stems. Has parsley-like leaves and a large white root that resembles a parsnip. The leaves, when bruised, emit a parsnip-like odor. It is common on waysides, around farm buildings, and in waste places. Both the leaves and the fruit are poisonous. The root becomes poisonous after the end of the spring growth. Persons poisoned by the plant should be given an emetic immediately.



JIMSON WEED: Also called Jamestown-weed and Thornapple. A shrublike growth with smooth green or purple branches. Leaves also smooth to the touch and strongly scented. Bears a hard, pricklylike capsule containing a large number of seeds. Grows in cultivated fields and waste places, particularly on rich soil. Found in all parts of the country. All parts of the plant are poisonous and some individuals develop a rash from contact with the leaves of the plant.



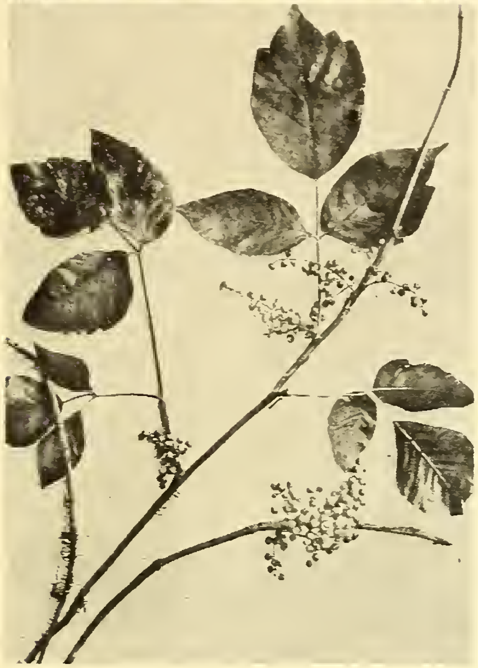
BLACK NIGHTSHADE: Also called poison berry. Fruit consists of a purple or black berry containing a number of seeds. Leaves and berries, especially in unripe condition, are poisonous. As the fruit ripens, the poisonous quality decreases. The cooked ripe berries have been used for pies, jams, and preserves. Apparently the cooking destroys the poison.



EUROPEAN BITTERSWEET: Has slender stems, woody at the base, and reaching a length of 6 to 9 feet. Leaves and bark of stem have a strong disagreeable odor. Bears small clusters of flowers, and a bright red berry that has a thin transparent skin through which can be seen a number of seeds. The berries can result in poisoning if eaten in quantity.

MUSHROOMS: There is no simple formula to tell a poisonous mushroom from a nonpoisonous variety. Best advice: (1) take along someone skilled in the knowledge of mushroom species, or (2) send a specimen of any particular species to the Bureau of Plant Industry, Department of Agriculture, Washington, D. C., who will tell you if variety is harmless.

Dont touch!



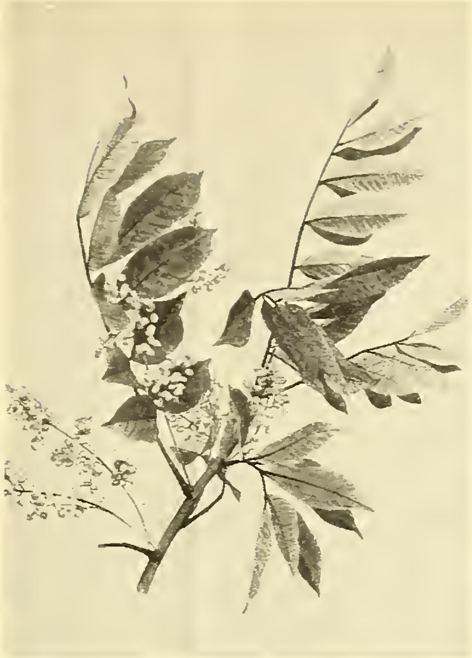
POISON IVY: Also known as 3-leaved ivy, poison creeper, climbing sumac, markweed, picry, and mercury. Sometimes confused with poison oak. A vine, shrub, or low, erect bush found generally in woods, in the open, in moist and dry soil throughout the country. Recognized by 3 leaflets, reddish-tinged in fall, and whitish, waxy berries. Poisoning may result from touching the plant, from handling clothing or other articles that have been in contact with ivy, or even from smoke from a burning clump of the ivy.

Prevention: Before contact with plant, make a solution of 5 parts of ferric chloride in 95 parts of a half-and-half mixture of water and glycerin. Apply freely to exposed parts of the body, then allow to dry. The solution is also helpful if used immediately after contact with the plant. Applying cottonseed oil, olive oil, or vaseline before contact with the poison is also partly successful.

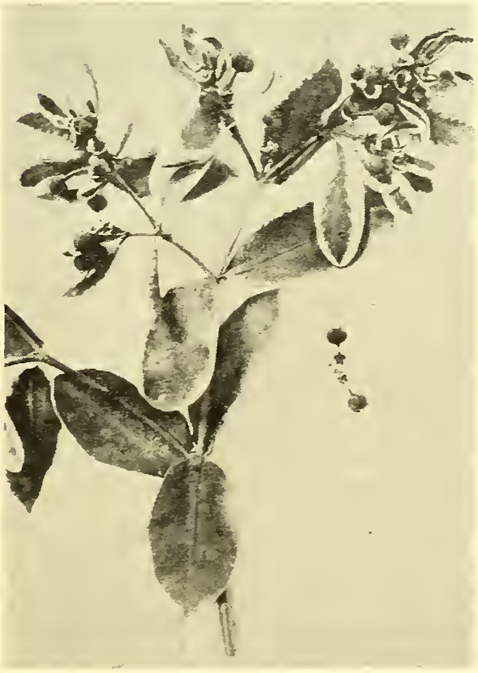
Remedy: In slight cases wash all exposed parts of the skin thoroughly with ordinary laundry soap and hot water as soon as possible after contact with the plant. Use running water, whip up heavy lather, rinse several times. Give special attention to finger nails and tender skin between the fingers. Don't use a brush.

In severe cases, consult a physician. One good remedy is a 5-percent solution of potassium permanganate applied locally. Never use greases or ointments or oils during early stages of irritation. Itching is relieved by application of very hot towels or calomine lotion to affected parts, or by local applications of solutions of cooking soda or of Epsom salts with bandages which should be changed frequently and kept clean.

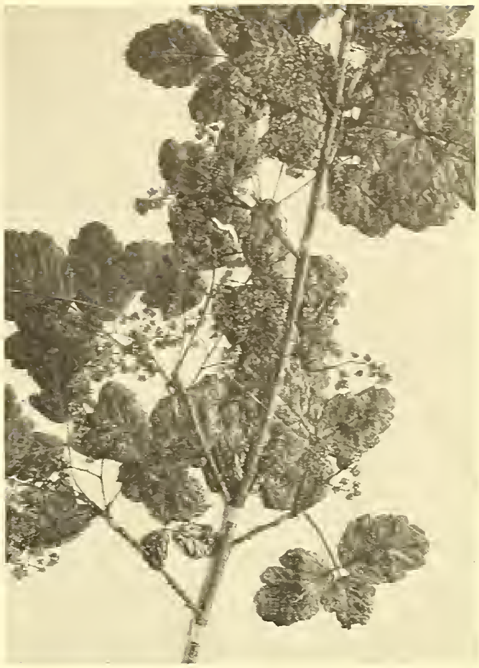
Effect of poison sumac and poison oak is practically the same as poisoning caused by poison ivy. Use the same preventive measures. Likewise, follow the same remedies and call a doctor if the poisoning is severe or doesn't respond to home treatment.



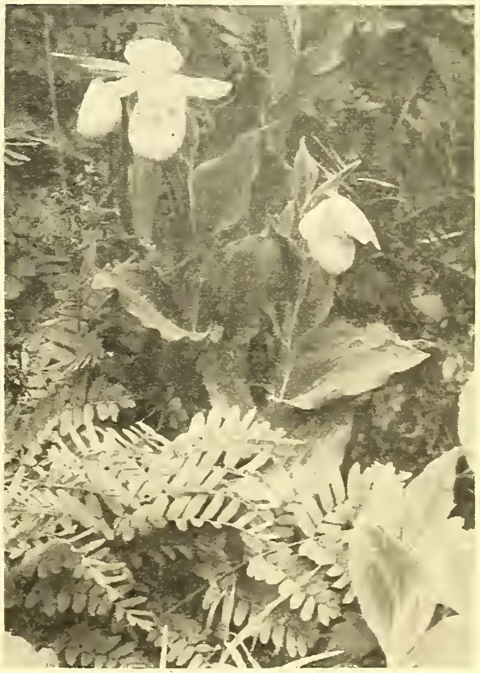
POISON SUMAC: One of the worst of the poison plants. Found in low marsh lands and swamps. Also known as swamp sumac, poison elder, poison ash, poison dogwood, and thunderwood. Grows 6 to 30 feet high. Has 7 to 13 leaflets arranged in pairs along stem. Leaves become russet and scarlet-covered in fall. Bears white berries, has a small amount of non-sticky fuzz covering stems. Non-poisonous sumac bears red berries, has a dense growth of reddish, sticky fuzz covering stems.



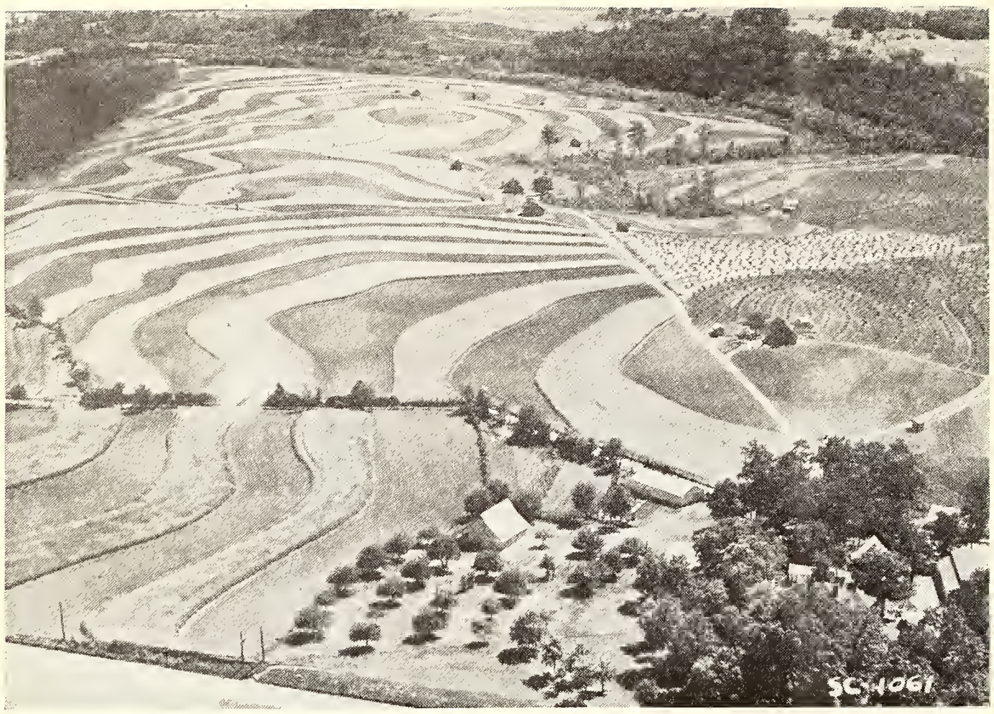
SNOW ON THE MOUNTAIN: Grows wild in the Middle West southward to Texas as a weed, used as an ornamental plant in the eastern States. Has smooth-edged leaves growing in alternate positions along the stem. Poisoning can result from contacting the milky juice found in the stem and leaves of the plant. Results in inflammation and blisters.



POISON OAK: Also called poison ivy, poison creeper, 3-leaved ivy, picry, and mercury. Leaves, bark, berries all poisonous. Description generally fits that of poison ivy (see left). May be a shrub or vine, sometimes intertwined in tree branches or other types of vines. Has triple-leaflets resembling oak leaves. Is found in the southeastern United States in fields, woods, along roadsides, and on banks. Name is a misnomer; it has no relation to the true oak. Note treatment under "Poison Ivy."



SHOWY LADY SLIPPER: Found in local bogs, about springy places, particularly in woods. Extends throughout eastern United States westward to Minnesota. Looks like ordinary lady slipper, with one or a few blossoms on the end of a leafy stem. Hairy leaves and stems both poisonous. Poisoning resembles that caused by poison ivy.



DESIGN for living on the land. The aviator's eyeview shows terraces and strips of cotton and small grain running over the land clean across individual farm boundaries. Soil conservation means that farmers must plan with one eye on the land in its setting and the other on the future.

It's Our Land

From across the country come more stories of the new care that once over-worked or under-nourished land is getting from farmers helped now by the farm programs

DUST BEGAN TO BLOW in South Dakota when the winter unfroze in the spring of 1935. The Williamses*, to take one imaginary family, tried to plant a crop, but it didn't take. By May Mrs. Williams had almost given up trying to keep her house clean of dust. The children's hair was always gritty from the blowing dust. There was grit in the food, and out on the bare desolate farm, hillocks had formed at regular intervals across the flat earth. Sand drifted up against the fence posts. From morning to night, the Williamses watched the sand swirl in the wind. When a big blow came, the sand billowed up like a snowstorm stinging the face, forcing a man to cover his face with his arms and bend down in the wind.

By the middle of May, the Williamses were waiting for a letter from Mrs. Williams' brother in Oregon. They had written him of their intention to abandon their farm. Would he mind if the family came to live with him for a while? The Williamses spent one whole day looking through the house trying to decide what they should take with them, and what they should leave. Mr. Williams fussed with the farm truck, wondering whether it would carry the family to Oregon.

THAT WAS 5 YEARS AGO. TODAY THE WILLIAMSES are still on their farm.

If you go to the door of their farm house and look out across the land where the sand dunes had begun to form back in the spring of 1935, you will notice something different. There are trees in the yard in front of the farm house. Out in the fields where the fence posts were buried in sand there is a wall of trees running from the end of the horizon in the north to the end of the horizon in the south, right angles to the wind.

Walk from the farm house down to the thickets and you will notice a wooden table and wooden benches built under the boughs of the cottonwoods. Last summer, the Williamses, had picnic suppers at that table two and three times a week. In July and August, they had watermelon feasts at the table with watermelons that were grown in the lee of the trees. There was a kitchen garden growing next to the trees, too, the first time the Williamses had ever been able to garden successfully on their farm.

Not only had the face of their farm changed; its mood had been lifted. Where once there had only been the wind-filled plains there was sound of birds. In the slowly accumulating forest litter, Mr. Williams started up a clumsy ringnecked pheasant. Bright red cardinals strutted in the shade, and sometimes the air grew suddenly still and they could hear the singing of a brown thrasher.

The birds have done more than alter the mood of the farm. They have helped with the farming, for birds feed on insects that attack growing crops.

Before the letter ever came back from Mrs. Williams' brother, several men drove out to the Williams farm. They were from the United States Forest Service. "Have you heard about the proposed tree belt," they asked Mr. Williams. He'd seen something about it in the papers, but it had sounded like some fool writer's pipe dream to him.

No, the experts explained, it wasn't a fool pipe dream. Of course, some of the things that had been said about it were somebody's make-believe. It wasn't going to transform South Dakota into Bali Bali, but it could save Mr. Williams' farm, and thousands more.

A TREE BELT COULD FORM A PROTECTIVE shelter against the wind for land 20 times as wide as the trees were high. Eight-and-a-half acres of trees will protect a 160-acre farm. You could grow a kitchen garden, the men explained. A tree belt saves water from the snows and the rains for your fields. It helps hold the soil, gives shade. Birds nest in the trees and help fight insects. Useful wild animals find a refuge in a tree belt.

Trees won't grow on this forsaken land,

---

* *Names are imaginary.*

Mr. Williams protested. But going to live with relatives, abandoning their home, was the last thing the Williamses wanted.

So they tried the trees.

Within a week WPA workers, CCC boys, foresters rolled down the road to the Williams farm on trucks, piled out with shovels and seedlings and began to work. In a single file across the farm, square to the wind, they scraped litter away, turned back the earth with shovels, placed the seedlings in the earth, filled in around them, and then stamped the earth down with their feet.

DURING THE SUMMER THE WILLIAMSES practically hand-nursed the trees, but it was worth it to see the trees come up. In 3 years, some of the trees grew to 20 feet and were 5 inches thick through the trunks. As he looked out on them, Mr. Williams made a simple effective comment. The old farm, he said, looked good to him again. He guessed he was sticking around.

Altogether, until the spring of 1940, millions of trees were planted with the cooperation of the Forest Service alone—miles of shelter belt, protection to a million acres of farm land in North and South Dakota, Nebraska, Kansas, Oklahoma, and Texas. A million more trees were planted in the drier, harsher regions of some of these States and in Wyoming and Montana by the Bureau of Plant Industry.

●

EVER SINCE ANYONE IN THE NEIGHBORHOOD can remember, people in the Elm Creek Valley of Texas have always said that the land there was as fertile as the Nile Valley.

Conversation has a way of whiffling first in one direction and then in another though, so it is hard to say just when the conversationed veered around and people began to say, this land is as fertile as the Nile Valley, but . . .

I notice one of my fields is beginning to get light in color, one farmer said.

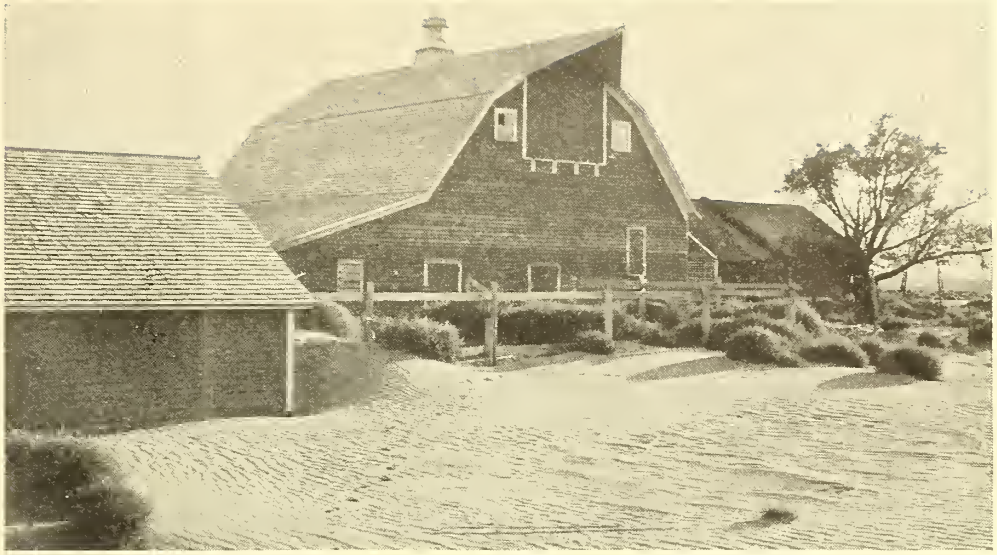
When my grandfather came out here, another said, black loam was 3 feet deep beneath the prairie grass.

Something strange's happening to this here soil, a third farmer said.

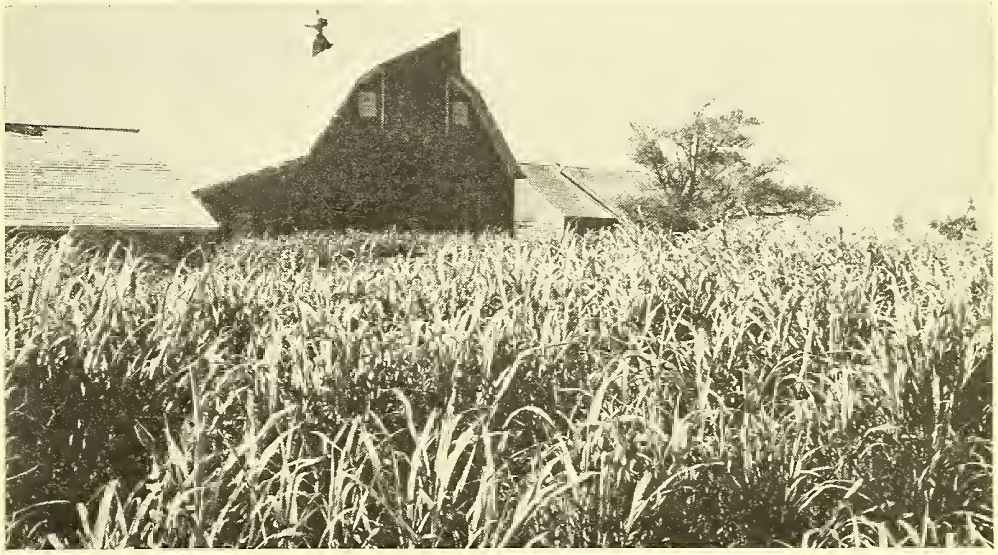
Soil's running off, a fourth farmer commented. Look at the creek. It's just choking up with silt.

You bet, another chipped in, and all that silt is topsoil off our land.

There was conservation in the air as well as conversation, however, and one day in the early part of 1934 a committee of farmers from Elm Creek Valley turned up in an office of the Soil Conservation Service.



DESERT marched up the window sills after 1935 dust storms and left sand piled in 6-foot drifts against these South Dakota barns. The family had to move. But careful replanting of tenacious grasses has turned the desert back. Ready to be moved into again, this farm can be held against the marauding desert by soil-conservation practices.



We'd like a conservation program in the Elm Creek Valley, they explained. Course, we can only speak for ourselves. If you asked our opinion, though, we think every farmer in the valley would join in some kind of program.

THE SOIL CONSERVATION SERVICE PEOPLE were sympathetic, but they explained that it wasn't the practice of the Service to establish demonstration programs in an area unless 90 percent of the farmers in the watershed—all the land drained by a stream—asked for the project.

Well, the spokesman for the committee said, suppose we call meetings of our neighbors. Would you come and tell us about soil conservation?

Sure, the Soil Conservation Service would do that, and a week after the committee went back home, requests began to come in for speakers. The speakers returned with descriptions of the meetings that were held in farm houses, in schools, in churches.

To put the meetings over, certain farmers were made key men, and they scoured through the valley by car, on horseback, by wagon, and sometimes on foot, to urge farmers to turn out for the meetings.

Within 2 weeks the original committee returned to the Soil Conservation office with 242 farmers' names on their petitions. Whereas, the petitions began, soil erosion is a problem of major concern, and they concluded, . . . therefore the undersigned request the Soil Conservation Service to render them assistance in soil conservation.

Boundary lines of farms are no respecters of nature. They may run down the center of a hill, across a creek, right across the crest of the hill, or can cut a hill square in half. But nature didn't cut the land up into farms. If there are any regions at all they are drainage basins beginning at the headwaters of a stream and running clear down to where the stream empties into a river, or a lake, or the sea.

If you are going to farm without upsetting the balance nature has worked out over millions of years of trial and error, then you have to work in her units, not in the units that are worked out in the county surveyor's office.

Ideally, that would mean working out a land use program without regard to individual farms. Practically, it means that soil-conservation experts must work toward the ideal as closely as they can while they enable each farmer to maintain or better his income from farming on the land he owns.

To look at the land as a whole, an airplane was sent $2\frac{1}{2}$ miles up into the air to fly back and forth across the valley taking pictures. Inside the plane, while a pilot kept one eye on a map and another on the road ribbons and curling silver streams below, a photographer cranked a handle on a camera pointed earthward through the floor of the plane taking pictures of the unwinding valley at regular intervals.

After these pictures were developed they were corrected for distortion, pieced together like a mosaic, pasted up, and then before the astonished eyes of the Elm Creekers there was a complete detail map of the valley.

Let's see, a farmer would say, looking at the map, here's the road, here's the stream, and this is my woodlot, and, by gad, here's my house.

From this map the soil-conservation experts studied the land contours, noted the farm lands subjected to the greatest erosion tension, spotted places to build dams and runoff channels, and, finally, from these details, they figured out a general plan for the conservation of Elm Creek Valley.

The big map was broken down into maps of farms, and then the experts went over these maps with the farmers, explaining what they could do on their farms, how each farm then fitted in with the general scheme, how it geared in with the plan for the farm next door.

Then the work began on the region, the farmers doing most of the work, the Soil Conservation Service giving general supervision, key farmers giving neighborly supervision, with the cost shared one-third by the Government, two-thirds by the farmer.

Here's an example of what happened. On one long slope there were 3 farms. One right above the other. When it rained, soil off the top farm (call it the Wilson farm) would wash down the hill into a stream that ran along the edge of the bottom farm. The Wilsons could prevent rains from doing damage if they terraced their land, and built channels which would drain off excess water.

But then unless the Johnsons, who owned the next farm, terraced to fit the Wilson terracing, the water draining off the Wilson land would gully and cut up their land. The same problem came up between the Johnsons and the Sanford sisters, who owned the bottom farm.

Under the soil-conservation plan for the area, however, all three farms were terraced, and channeled, and drained as if they were a single unit. All three families worked together to install the terraces, and now that they are installed, each family has agreed to maintain the channels and terraces on its land.

Two farmers with adjoining pasture land discovered that both of their pastures were going to wash away if they used them separately, but if they threw them together, defining the rights of each to the new pasture, they both would gain.

When the mail plane flies over Elm Creek Valley these days, the pilot, if he looks down, no longer sees the ragged patchwork of hundreds of farms, each one cut up and pieced together to suit each farmer's fancy. Instead, there are strips of grass winding through the entire valley, holding the soil in the adjacent parallel brown belts of cultivated land. Terraces ridge entirely around the hills, scalloping the knolls in the valley. On the low sloping land, the earth seems to ripple where the land has been plowed in contour.

From the sky the valley is a study in continuous unbroken curving designs, and that's because there is one design for the entire valley. Eighty-two thousand acres in 613 farms, and not 613 irregular little designs for each of the 613 farms.

As one farmer expressed it, farms belong to each of us, but altogether it's our land.

By planting trees, by seeding grass, by building terraces, by contour farming, by strip cropping, by filling gullies, by damming them up, by shifting from soil-wearing crops to soil-building crops, the work is going on now.

In the end, what is hoped for is a balance, between land and climate, plant and animal, and between all of these and people so each attains its fullest and most enduring expression.

FIVE years ago the wind blew grit and despair over this land. Instead of giving up, the farmer turned to, with the help of the Forest Service and other Government agencies, to build a windbreak across the flat land. When he planted these trees, some people told the farmer he would never live to see the day when he could picnic under them. Here he is in 1939. Everyone liked this picnic among the trees, and so did the photographer.

SCIENTISTS WORKING in the field of nutrition knew that calcium was the basic element in bones by the time George Washington was elected President of the United States. About the year 1870, one scientist, a French worker named Papillon, mulled over the fact that bones were largely composed of calcium and that they were also heavy and brittle. Proposing to do something about this circumstance, he experimented to see if he could persuade rats and pigeons to develop bones made of light, durable metals. With this in mind he fed his laboratory animals foods containing magnesium and aluminum instead of calcium. It was a good idea but the rats and pigeons died.

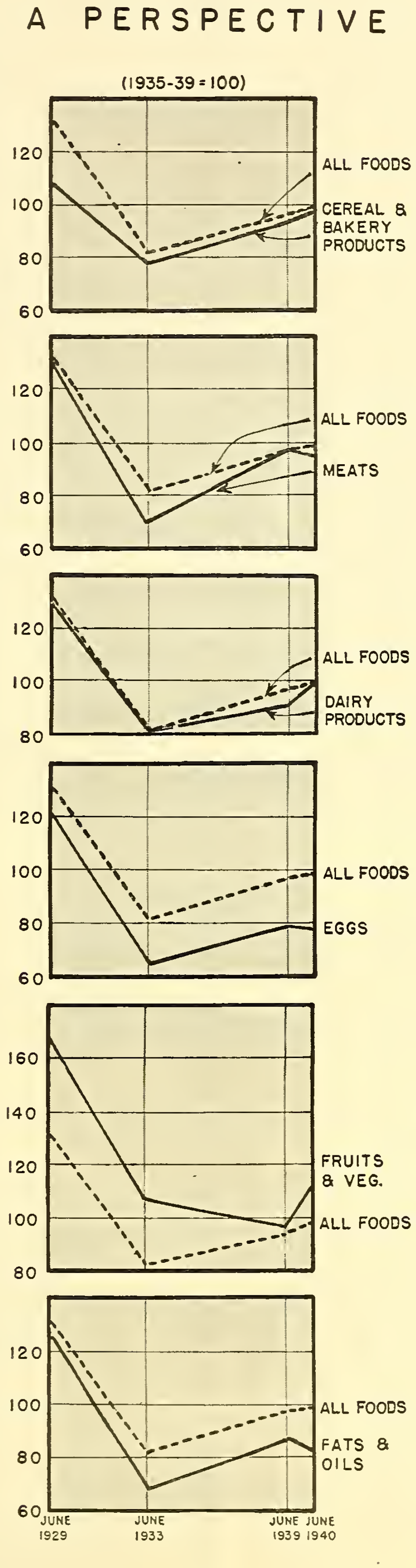
Today, there are aluminum airplanes and aluminum trains, but still no shining aluminum bones. And, old-fashioned as it is, calcium is still highly regarded in the diet. An expectant mother still should have at least a quart of milk a day to take care of her own calcium requirements and those of her child. Children, too, need milk for bones and teeth and a quart a day is advisable.

Most people are reconciled today to bones as they are. They are not reconciled to the fact that all human beings can't afford to buy the milk they need for a healthy diet. One step forward from this condition, however, is being taken with the 5-cent milk program. Nickel milk is one plan by which the Department of Agriculture, in cooperation with local agencies and farmers, arranges for milk to be sold or given to needy families at a price they can afford or the community can finance. The June 1940 issue of CONSUMERS' GUIDE describes this plan as it works in New Orleans.

Another step forward in the same direction by a different path has been taken in St. Louis, Missouri. There milk is sold not only in quart bottles but also in half gallons and gallons, and consumers who buy the bigger quantities save on each quart. A gallon of milk delivered to a home costs 42 cents; 4 quarts in separate bottles would cost 50 cents. Stores sell milk in half-gallon bottles at 20 or 21 cents; the same amount of milk sold in quart bottles would cost 22 to 24 cents. Still another saving is offered consumers who take the time and trouble to go to the dairy plants. There milk sells for even less. Not only is the cost per quart between one and 2 cents less per quart, but families who buy a half gallon get it for 18 cents or a gallon for 35 cents.

What St. Louis is doing, other cities could do to bring milk—with its minerals and vitamins—within closer pocketbook distance.

YOUR FOOD SUPPLIES AND COSTS



FOOD COSTS. Retail food costs ordinarily decline slightly during the first half of the year. This year food costs have moved up slowly. In mid-June costs were nearly 4 percent higher than at the beginning of the year, and 1.3 percent above their mid-May level. Major factor behind this upswing has been a larger than usual increase in fruit and vegetable prices. During the month ending in mid-June, advancing beef prices also contributed to the higher cost level.

While food costs in June were 5 percent higher than in 1939, and about the same as in June 1938, they were below the June levels in other years since 1934. Most of the increase in food costs since last June has been due to higher prices for dairy products, cereal and bakery products, and fruits and vegetables. Meats, eggs, and fats and oils are priced below their levels of a year ago.

FOOD SUPPLIES. Cantaloups, green corn, nectarines, and huckleberries usually are most plentiful in August. Supplies of pears, grapes, apples, figs, plums, beef, and poultry also increase seasonally in August. However, marketings of dairy products, hogs, eggs, and watermelons generally are below their July levels. Peach supplies in August ordinarily are smaller than in July, but this year the difference is expected to be less than usual due to a small early peach crop.

FRUITS. Fresh fruit supplies available for use in the United States this season may be a little larger than last year, even though total fruit production is expected to be smaller. This is due to the prospect of a smaller use of fruit in canning and drying, and reduced exports.

VEGETABLES. Supplies in August probably will continue larger than last year.

MEATS. More lamb and pork, but less beef than last August are in prospect.

POULTRY AND EGGS. Outlook still is for smaller supplies than in 1939 during the remainder of the year.

WHEAT. Supplies this season (July 1, 1939–June 30, 1940) probably will be about the same as last year.

DAIRY PRODUCTS. More favorable conditions for milk production point to larger supplies than last season through the fall months.

CANNED VEGETABLES. Current pack probably will be larger than last year, but total supplies may not differ much due to a smaller carryover.

IN THIS ISSUE

JULY 1940 ● VOLUME VI, NUMBER 18

What Kind of Wood Do You Want? . . 3
Below Zero 6
Pointers on Poisonous Plants 9
It's Our Land 12
Your Food Supplies and Costs 15

U. S. GOVERNMENT PRINTING OFFICE 247459°

For sale by the Superintendent of Documents, U. S. Government Printing Office, 5 cents per copy, 50 cents per year, 80 cents, foreign.

1.94
AD4

U. S. F. S. RECEIVED
LIBRARY
SEP 20 1940

FSA WEAVING

RL ~~#5~~

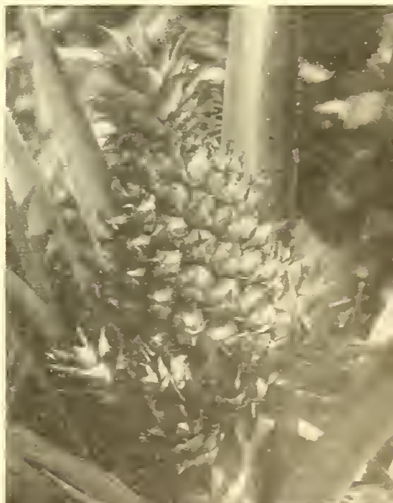
CONSUMERS' GUIDE

AUGUST 1940

MILK GLOSSARY

SELF-HELP CO-OPS

FURNITURE



PINEAPPLE

CONSUMERS' GUIDE

AUGUST 1940 VOLUME VI, NUMBER 19

A Publication of the
Department of Agriculture
Washington, D. C.

Issued monthly from June through
September; Semi-monthly from
October through May

Prepared by
Consumers' Counsel Division

D. E. MONTGOMERY, CONSUMERS' COUNSEL
MARY TAYLOR, EDITOR

The Consumers' Guide is printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Official free distribution, 150,000 copies per issue. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.

"THEY KNEW what they wanted," was the title of a popular play some years ago. It could be the title of a real-life drama that has been enacted out in Decatur, Ill. Decatur's drama might even be titled, "They Knew What They Wanted and Got It."

"They" are the consumers of Decatur and of Macon County, the county in which Decatur is located.

What they wanted and got were Government grades for meat. Three years ago it was impossible to buy Government-graded meat in Decatur. Today 4 meat markets carry graded meat regularly, while 2 sell only Government-graded meat.

How the consumers of Decatur got what they wanted is the plot of the Decatur drama—a drama that has a moral for consumers everywhere.

The situation in Decatur 3 years ago was the situation which now prevails in many American cities. Meat, as always, was relatively expensive; that made it necessary for a housewife to be sure she got what she paid for. There was the problem, too, of comparing prices. "Why," a housewife would ask her butcher, "is the steak here more expensive than a steak at the market down the street?"

"Well," the butcher would say in the jovial way butchers have, "this is better meat, this is real choice meat." You expect a butcher to say that, but a reply like that isn't always reassuring.

Then one day things started happening. A women's club in Decatur had a class in consumer problems, and the instructor of this class went off 3 years ago to attend the annual conference of the American Home Economics Association in Seattle, Wash. One of the speakers at the conference was the Chief Dairy and Food Inspector of Seattle, and he told the conference how Seattle has a compulsory meat-grading ordinance.

All beef, lamb, and mutton sold in Seattle must be Government graded. Meat in Seattle must bear a Government-grade stamp, just as packaged foods throughout the United States must be labeled with the information required in the Federal Food, Drug, and Cosmetic Act.

The speaker ticked off the advantage of Government meat grading while the conferee from Decatur listened.

"One," the speaker said, "it protects ethical dealers from unfair practices of their competitors.

"Two, it's possible for consumers to compare the prices of meat of the same quality.

"Three, consumers can shop more economically by buying better grades when better grades are necessary, and by buying the less-expensive grades when they will do.

"Four, meat prices conform more closely to the actual value of meat. The meat grade answers questions about quality without blarney or misrepresentation.

"Five, farmers gain because they get better prices for their better meats, average prices for average meats."

What hit the visiting instructor from Decatur with most force was the fact that meat grades would serve 2 important purposes in Decatur and its surrounding country. Meat is Illinois' third most valuable agricultural product. Meat takes a big chunk out of the consumers' food dollar. Grades would help the consumers of Decatur to shop more efficiently and at the same time would help farmers get fairer prices for one of their most important products.

Back in Decatur after the conference, the instructor lost no time telling consumers about Government meat grades.

The women's club was told about Government grades.

Word went out to the members of the Macon County Home Bureau Units, that is, farm wives in clubs working with the Extension Service.

Homemaking classes conducted by the Parent Teachers Association of Decatur were told about grades.

Down from Chicago came Federal meat graders to explain how meat is actually graded. Speakers came to town from the University of Illinois, under the auspices of Decatur organizations to explain the whys and hows of meat grading.

Out over the air by radio went a program on Government meat grading with a consumer putting questions to an expert brought down from the University of Illinois.

Demonstrations were staged so Decatur consumers could see the need for Government meat grading themselves. Meat cuts were purchased at several markets, for example. Records of the prices paid per pound at each market were kept, and then the meat was graded in front of the consumers. Price, this demonstration revealed, varied with little relationship to quality.

Then, one day, another demonstration was arranged. Arrangements were made for a consignment of Government-graded meat to be delivered to a local store. Unfortunately, the graded meat didn't turn up on time, so the demonstration had to be abandoned. Hopefully, however, it was announced to the assembled consumers that graded meat would be on sale the following day at such and such a store. The result was astounding. Women flocked to the market and bought out the Government-graded meat before the owner of the store could catch his breath.

"If that's the way people feel about Government-graded meat," the butcher said, "then I'm going to sell it."

Other markets soon began to get the idea, too.

Low-income families as yet have not been taking advantage of the Government grades for meat. One reason for this is that the equally nutritious, but less-expensive grades of meat are not being Government graded. The lower grades could be graded, however, for the Department of Agriculture is glad to grade any meat it is asked to grade. Since the grading system is voluntary, however, it is up to consumers to persuade packers to ask for the complete grading service. Grades are just as valuable, more valuable in fact, to families who have to cut corners when they buy food.

The development of Government grades for meat is a story by itself. This story was told in the June 1940 issue of the *Consumers' Guide* in the article "Buying Meat by Grade."

●

OUR THANKS go to the Farm Security Administration for the main illustration on the cover and for the 2 photographs of weavers on pages 3 and 4; and to the Rural Electrification Administration for the photographs on pages 8, 9, and 10.

Homespuns for Farm Homes

Farm Security Administration shows low income families how they can make their own fabrics at minimum cost

WHEN SPRING CAME to South Carolina this year, it brought with it a little pilgrimage of women in search of an art, the art of using their hands and some raw materials from the land to weave a bit of beauty into their plain homes.

There were 17 women, from 8 Southern States. They had come back to school, invited by the Farm Security Administration. They came from communities where FSA has been helping farm families to get a new start in life by lending them money to move from barren land and to resettle on farms and in homes where at least a minimum of the decencies of life are now within reach.

Reason for the invitation was that FSA had set up 2 schools, one for the white women, the other for the Negro women, where they might learn to weave. Heading the schools was a gifted teacher of weaving, lately come from Scandinavia where she had taught women in the folk schools how to make the fabrics they need for personal clothing and to use in the home. School for these women in South Carolina was to last only 8 weeks, but during that time they were to learn not only how to weave but how to instruct others in the practical art when they returned to their home communities.

UNLIKE MANY CREDITORS, WHEN FSA makes loans to distressed farm families it does not leave them to struggle alone with the burden of their debt. Together with the farmer and his wife, it works out what is called a farm and home plan, a plan that provides for making as much as possible of the family living right on the farm. FSA families learn, with the help of home management specialists, how to plan gardens that will produce what the family needs for a balanced diet throughout the year. They learn how to prepare and conserve food. They learn how to make and remake clothes, to put together pieces of furniture. Because cash income at best is meager, many things

which better-fixed families buy at the store must be made at home if FSA families are to have them at all.

That's why weaving is one of the handicrafts FSA farm women are learning these days. It didn't start at the little South Carolina schools, but the instruction which the 17 women received there put new life and fun and skill into the job of making materials for dresses and bedspreads, curtains, and tablecloths.

People who are poor in income sometimes are rich in other things; rich in imagination and talent for using their hands, rich in ingenuity in fashioning something lovely out of something plain. These 17 women showed they had such gifts. What FSA was giving them was the chance to learn new ways to put these talents to work. Most of the women had had little experience in weaving. There was one woman who couldn't even read or write.

MOST FUN CAME IN CREATING NEW DESIGNS. To learn how, their teacher gave each of them a box of water colors. She asked them to take these home and to paint on a sheet of paper their ideas for designs suitable for a curtain, maybe, or dress goods, or a table cover. They talked about their houses: what they were made of, how they were finished inside, how their furniture and rooms were designed, what colors would look best at their windows and on chairs and on tables. Among them, they agreed that since their homes were simple, any materials they made to use in their homes should be simple in design.

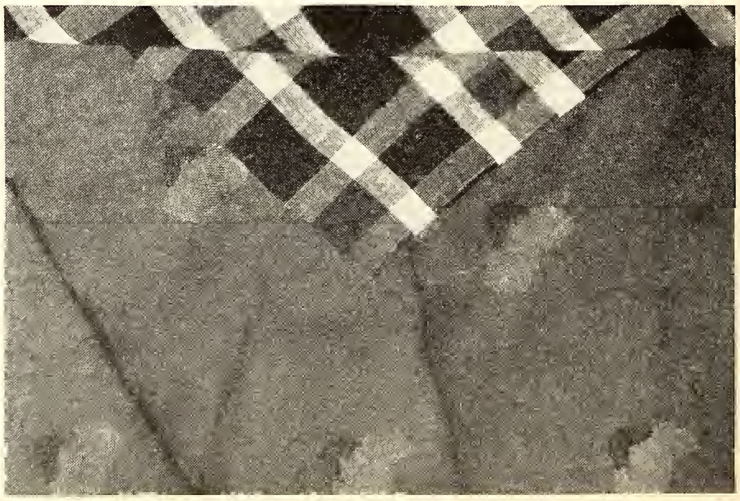
Back in their rooms, each woman struggled with her paint box and brush, trying to translate on to paper pictures of flowers, cotton bolls, birds and trees they were familiar with. Day after day, they would bring them to class, toss them on the table for the teacher to see. No one marked her name on her own design. From these unlabeled drawings the group chose the ones which seemed most attractive. When this vote was made, the women who won the honor of having their drawings selected were asked to tell their names. There was pride in the winning of this recognition.

Out of the collections of designs came stylized sketches of evergreen trees, rhododendron flowers on creamy backgrounds, oak leaves, and acorns. Designs for clothing materials produced patriotic checks and stripes in red, white, and blue; neat herringbone weaves; nobbly, solid-color materials. There were bright bordered designs for towels, table linen; formal stripes and bars for upholstery fabrics. Part of the instruction was learning which design most effectively fitted the purpose to which the fabric was to be put.

IT'S A LONG DISTANCE, AS THESE WOMEN soon learned, between a beautiful picture in one's head or on a piece of paper, and a finished piece of goods. The hardest step of all comes first, the job of acquiring skill in threading looms. Before they had the fun of seeing a pattern unfold beneath their fingers, the women had to master the mysterious techniques of reeling the warp and putting it on the loom to make the variations in pattern. The instructor was stern; every step in the process had to be done without a mistake, for weaving is a craft you can't do "almost right." The job of disciplining untrained fingers and minds to be exact was a tough one. Because it was difficult, it made the reward of accomplishment even greater. Almost a whole week was spent in learning this one operation.

After the warp was ready, weaving the pattern was simple in comparison. Back and

SPARE TIME is put to good use learning the new kind of weaving FSA is introducing throughout the South. At least, that's the opinion of women on FSA projects who are beginning to brighten up simple homes with materials like these. Guided by FSA's alert Home Management Division, they designed and wove fabrics of cotton (left), linen (center), and wool (right). Women have a good time weaving, but they like it even better when they get the results. Already they've found that table and bath linen, curtains, slip covers, spreads, and even rugs can be rolled off their looms at a cost that looks minute next to price tags of similar things in stores. Eventually they may meet costs by selling small surpluses.



forth the shuttles were moved, inch by inch the fabrics grew. Each woman was given a chance to work on each different type of fabric, not just for variety's sake but to give every one the broadest possible training. One woman became so adept she was able, in 6 hours' time, to weave a 6-yard piece of Alice blue tweed, enough to make herself a handsome suit.

During the scant 8 weeks of training they tried over and over again the intricacies of threading their looms to make their patterns exact, of working the cross threads of the weft together without a flaw, until they began to feel confident that they could go back to their projects and show the work to their neighbors.

When school came to an end, all the different types of materials were cut into pieces, so that each scholar would have a large-sized sample to take home with her and show the women there what can be done by fingers deft in weaving.

Because cash is short in FSA farm families, it was important to learn how to use the most economical yarns. Most of the materials woven at the schools were made of cotton. Cotton is abundant; it can be put to many uses; it wears well. Out of the looms came cotton towels, cotton dress goods, cotton curtain materials, cotton upholstery fabrics. Because some FSA families may, in time, be able to grow their own wool and flax, the apt scholars learned how to use these fibers, too. They used yarns already dyed, in the lovely soft rust red color of Carolina soil, the blue of Southern skies, soft spring greens, the purple of thistles.

Careful count was kept of the cost of the yarn, and the cost of each fabric produced.

Locating the most efficient looms to use at the schools wasn't easy. The instructor responsible searched far and wide. She finally found what she wanted in a remote corner of Michigan where an old Swedish craftsman had stuck pretty close to the designs used abroad. His looms were almost entirely of wood—hardwood that would stand up under the pummeling that weavers give their looms; wood which is lighter and easier to handle than steel. All looms were wide enough to produce material 45 inches in width. Some were wide enough for 60-inch fabrics. It cost FSA $75 for each loom bought for the first classes. Now, however, the FSA has blueprints from which the people themselves will be able to make additional looms at a cost of about $15. Looms used at the schools were later sent to FSA communities on loan until the women could find ways of purchasing them.

Already these women are back at their homes again, passing along to their own communities the benefit of the training they received at the South Carolina schools.

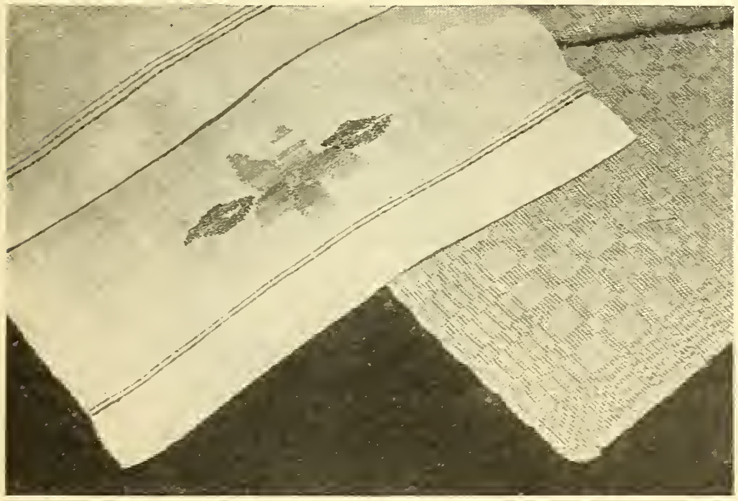
Tygart Valley in West Virginia is one such community. When their neighbor-teacher came back from South Carolina, there were over a dozen women ready and eager to see what she had to show them. They had been doing some weaving in a little roadside shop which had been in existence for 4 years, so they were one up on many of the FSA communities, but they still had much to learn to perfect their talents and products.

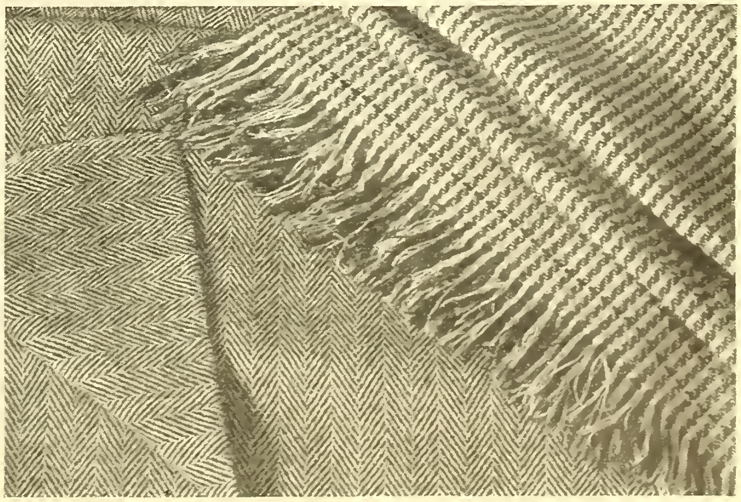
First off, their neighbor showed them the new loom she had used at Orangeburg, S. C. Everyone tried it. Then she showed them her book of patterns. Each page had a patch of material she'd learned to weave. Under each colorful swatch were the directions for setting up looms and weaving the design. Everyone wanted to try new patterns at once, so they decided to work together at designing and weaving curtains for the shop itself.

They looked over the yarns they had on hand, found a good supply of red, white, and blue cotton. It was a perfect selection of materials for a bright checked gingham, which would add the gay blocks of color they needed with their unstained wood walls. When they started out they soon found weaving more unusual patterns was much stiffer work than they were used to. Besides, they'd always had their looms made ready for them. Now they had to do all the preliminary work themselves. Once weaving had begun, they felt more confidence in their ability than they'd ever had. There was a constant hum of conversation about other materials they could make. One woman had an idea for material to cover a chair she'd been hiding for years. Another talked about a Christmas tree design she'd thought of for curtains in a child's room.

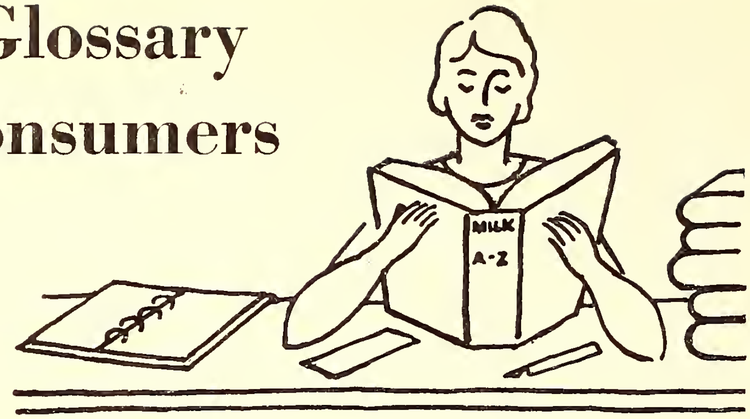
FSA has laid plans for classes like these on other projects. Already the teacher who supervised the first South Carolina classes is shuttling from project to project getting things started on the right track, guiding beginning weavers over the hard spots. The main objective, everywhere, is for interested women to learn to make the things they need and to make the weaving self-sustaining so it won't be a drain on skimpy incomes.

Raising the cash to buy looms and materials, now, would be a hard task on most FSA projects without outside assistance. By securing small co-op loans from FSA, women get a start at weaving. A loan of $200, sufficient to get going, is not too heavy a burden when 20 women share principal and interest payments. Each woman's debt of $10 is spread over 5 years. She must pay back $2 each year plus interest at 3 percent, which amounts to 30 cents the first year, less the following years. With $200 loans, weaving is getting started.





Milk Glossary for Consumers



Words can be made to work when people agree on what they mean. Here is a catalog of some words people use when they talk and think about the only substance which nature has designed solely as food

WELL-ORDERED dictionaries in most languages start with the first letter of the alphabet and run in a decorous manner to its last.

A milk dictionary, being a special sort of thing, has to start with a definition of milk.

Ask an expert what is electricity and he will tell you what electricity does. It produces heat, light, motion. Ask an expert what is milk, and he will tell you not only what milk does, but what it is physically and chemically.

MILK

"Milk is a whitish or yellowish fluid secreted by the mammary glands of female mammals for the nourishment of their young."

Mammary glands are glands in the breasts.

Mammals are animals with backbones who nourish their young with milk.

All of which rather brings you back to the place you started from.

Starting out again, this time with the chemist, we find that all milk, from whatever mammal it comes, contains water, protein, fat, lactose, and ash. That is its chemical content.

Experts have measured the chemical differences that are typical of the milk of various mammals. Here they are:

	Water	Protein	Fat	Lactose	Ash (minerals)
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Cow's milk . . .	87.17	3.43	3.74	4.94	0.72
Woman's milk .	87.43	1.63	3.75	6.98	0.21
Goat's milk . . .	87.14	3.71	4.09	4.20	0.78
Ewe's milk . . .	82.90	5.44	6.24	4.29	0.85
Mare's milk . .	89.04	2.69	1.59	6.14	0.51
Reindeer's milk.	63.30	10.30	22.46	2.50	1.44

Chemically, reindeer milk is the most concentrated.

Mother's milk has a relatively low protein content, a relatively high lactose content.

Cow and goat milk are similar in chemical composition.

Milks differ importantly, however, apart from their chemical composition.

These differences have to do with the size of the fat globules, and the characteristics of the protein. Both of these factors are important because they affect the digestibility of milk in the infant's stomach.

The protein of cow's milk is largely casein which forms a solid, tough curd in the stomach. Mother's milk on the other hand forms a tender, easily digested curd.

Cow's milk, however, may be partially rectified in this respect by boiling, homogenizing, or by adding either a thin cereal gruel or a gelatin to it.

Evaporated milk is more digestible than some other forms. Dextri-maltose and glucose, forms of sugar, are sometimes added to cow's milk to take the place of lactose.

Nutritionists add these facts: All milk contains varying amounts of vitamins, minerals, sugars, and calories. Some milks have more of each element than do others; some have less. Even the milk from one type of animal is not a standard uniform product. Cow's milk, for example, varies chemically and nutritionally with the breed of cow, its feed, the time of year, and other factors.

Most important of all animal milks in American consumption is cow's milk. Since this glossary is going to be concerned henceforth solely with this kind of milk, its next major definition must be of a—

COW

Cows are the female of the genus *Bos* which belongs to the family *Bovidae*. This means the cow is a ruminant usually with a pair of unbranched hollow horns. A ruminant is an animal which eats its dinner over and over again, or chews its cud.

Raising cows for the production of milk for humans is supposed to be a 10-thousand-year-old practice, though it is by no means universal. In some places it is more advantageous to breed goats, rather than cows, for milk. Selection and breeding of dairy cattle in order to make them more efficient producers of milk is probably 2,000 years old.

Most important breeds of dairy cows in the United States are: Holstein-Friesian, Jersey, Guernsey, Ayrshire, Brown Swiss, and Dutch Belted.

These breeds differ from each other for dairy purposes in the amount of milk they produce, the butterfat content of the milk, the size of the fat globules in the milk, and the color of the milk. Feed and care of dairy cattle also affect milk in these respects but breed is of sufficient importance that considerable emphasis is placed upon it by dairymen.

While milk from different cows of the same breed will vary in quality and quantity, milk produced by the various breeds have the following general characteristics:

Holstein-Friesian: An average butterfat content of 3.4 percent; small fat globules; little color.

Jersey: Average butterfat content of 5.4 percent; large fat globules; richly colored.

Guernsey: An average butterfat content of 4.97 percent; large fat globules; richly colored milk.

Ayrshire: An average butterfat content of 4 percent; relatively small fat globules; little yellow color.

Brown Swiss: An average butterfat con-

tent of 4 percent; medium-sized fat globules; little yellow color.

Dutch Belted: An average butterfat content of 3.9 percent; similar in many respects to Holstein milk.

The average cow begins to produce milk at about the age of 3, and continues to produce until she is about 12 years old. She has a life expectancy of about 16 years, but when her milk production begins to fail with old age, she sometimes ends her allotted span at the butcher's.

The average cow, a statistical abstraction which does not have horns, produced about 2,108 quarts of milk in 1938. That's slightly less than 6 quarts a day. Every day's output, however, doesn't equal every other day's. Cows produce most milk, as a rule, in summer, least in winter. In 1938, the average June production was almost 8 quarts a day; in February, less than 5 quarts a day.

So much for an introduction.

Now to the serious business of defining the words commonly used in our part of the world where cows and humans have dealings with each other.

A

ACIDOPHILUS. A form of buttermilk made from sterilized skim milk by adding a culture of bacteria known as *Lactobacillus acidophilus.* These bacteria, like certain other micro-organisms found in milk, destroy putrefactive bacteria which sometimes occur in the stomach. Lactose—milk sugar, which encourages the growth of this type of bacteria—is also added to the milk sometimes. Usually acidophilus is prescribed by physicians when it is needed.

ADMINISTERED PRICES. When the price of a commodity is determined by free and uncontrolled bargaining among buyers and sellers acting as individuals, the price of the commodity as it is determined in the market is called a free, or competitive, price.

On the other hand when the price of a commodity is fixed by a board or a Government agency, or by the decision of one company or a group of companies controlling a large part of the supplies of that commodity, or by agreement between a substantial number of the buyers and sellers of the commodity, the price arrived at is called an *administered price.*

Free prices usually fluctuate from day to day as supplies are plentiful or scarce, or as buyers are willing and able or unwilling and unable to make purchases.

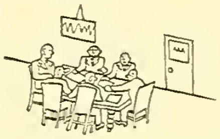
Administered prices tend to remain at the same level until a decision by the agency fixing the prices is made to alter them.

Milk is a commodity whose price is sometimes administered. When the price of milk is fixed by administrative decisions, consumers should have a hand in determining the decision.

Where milk prices are administered by private companies, there are no public hearings, but here consumers can make their opinions heard by bargaining as a group with the agency which fixes milk prices. Where the administered price is set by a Government agency, public hearings are usually held to secure evidence upon which to base decisions. Consumers may influence these decisions by taking an active part at milk hearings.

ADMINISTRATOR, MARKET. (See Agreement, Marketing.)

AGREEMENT, MARKETING.



Under the Agricultural Marketing Agreement Act of 1937, the Secretary of Agriculture is authorized under certain circumstances to enter into marketing agreements with the producers and handlers of various foods, including milk, and to issue market orders.

Marketing agreements and orders may be issued only in cities that obtain a substantial part of their milk supply from across State boundaries.

A marketing agreement is a contract under which handlers agree to pay producers for their milk according to a fixed schedule of prices. It is issued after the Secretary of Agriculture, on request, has called a hearing and has ruled, on the basis of evidence received, that such an agreement is desirable.

It provides also for a method of payment and for a market administrator, selected by the Secretary of Agriculture.

When the terms of a marketing agreement are accepted by at least two-thirds of the producers and a majority of the handlers in a particular milk market, its terms may be set forth in a marketing order, issued by the Secretary of Agriculture. This marketing order makes the terms of the agreement apply to all handlers in the milk shed, whether or not they originally subscribed to the agreement.

If two-thirds or more of the producers, but less than half of the handlers, accept the marketing agreement, a marketing order may be put into effect by the Secretary if approved by the President of the United States.

Marketing agreements and orders fix the minimum price paid for milk by handlers to producers. They do not establish retail prices of milk. However, since the price received by producers has large importance in the eventual retail price, consumers are vitally affected by marketing agreements and orders.

For this reason, the vital stake consumers have in the actions of the Surplus Marketing Administration has been recognized by the creation of the office of Consumers' Counsel. It is the function of this officer to represent consumers at hearings prior to the issuance of a marketing agreement or order, to notify consumers of the hearings, to cooperate with consumers who wish to appear at hearings, to present evidence in their own behalf, and to publish information designed to educate consumers to an understanding of the problems that affect their purchase and use of milk (and other farm products).

B

BABCOCK TEST. A method of determining the amount of butterfat contained in milk.

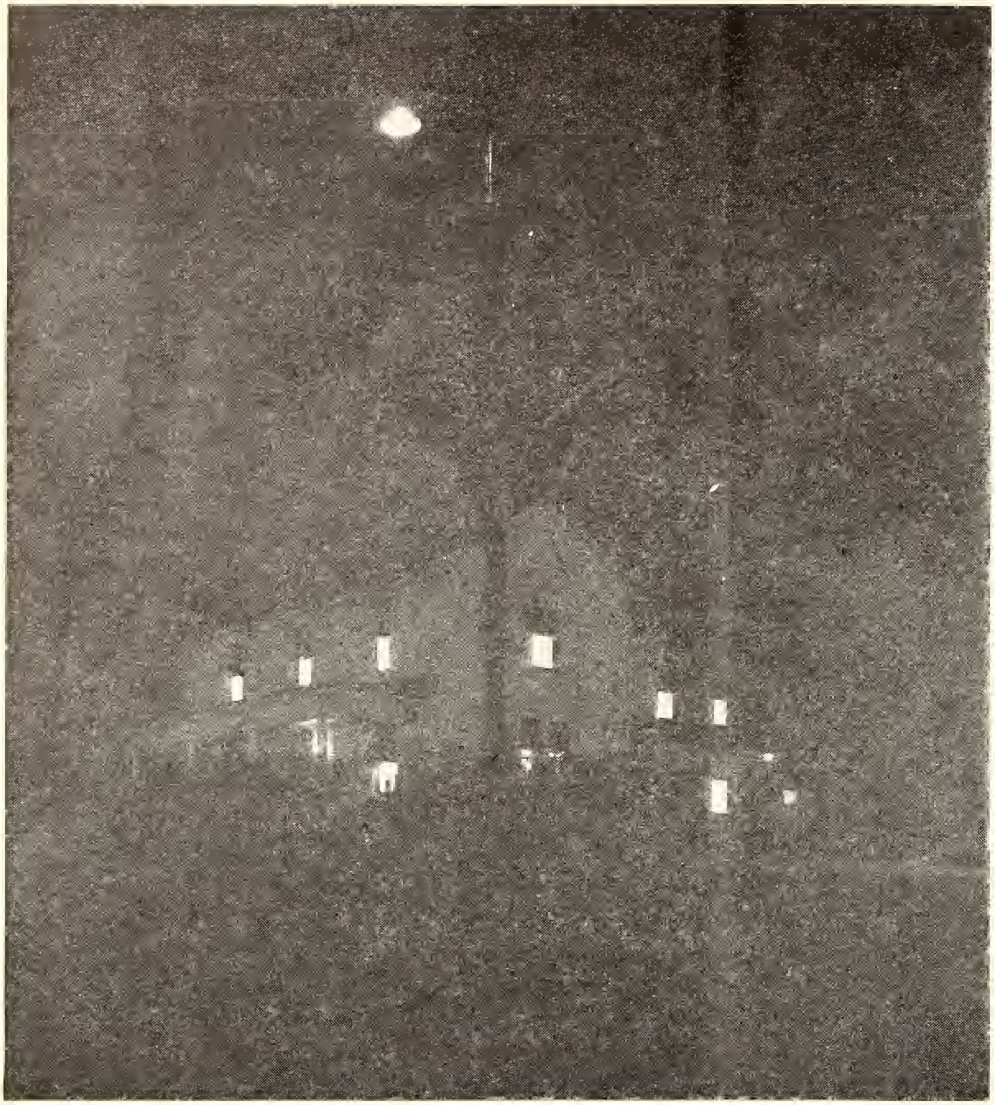
BACTERIA. Minute living cells are found almost everywhere in nature. Those found in milk are of two kinds: The kind that causes disease, and the kind that doesn't. They may or may not contain coloring matter.

Bacteria are one of the lowest forms of micro-organic plant life. A cubic centimeter of milk may contain billions of bacteria.

Since bacteria are living forms, they require a particular kind of environment in which to thrive. In general, they need food, warmth, water, and air. Milk, since it contains all these elements, is a favorable environment for bacteria. Some temperatures encourage their growth; others may either check or destroy them altogether. Usually bacteria can continue to live at low temperatures, but are not able to multiply. Refrigeration of milk consequently serves to prevent their multiplication though it does not destroy them.

At medium temperatures, between 50 to 110 degrees Fahrenheit, bacteria in milk may thrive. Temperatures above 142 degrees usually retard their growth or destroy them. Practically all of the known bacteria which produce disease are destroyed at temperatures over 142 degrees, provided the milk is held at this temperature for 30 minutes.

[Concluded on page 15]



Self-help Cooperatives Turn the Trick

Low income farmers find how these cooperatives can cut the costs of electricity by giving them a chance to help build their own lines

DO YOU START the day by going to an outdoor pump to splash some water on your face, and end your day as soon as the sun sets because your eyes can't take it when you try to read by oil lamp or candlelight?

Such a life probably sounds as remote to you as Abraham Lincoln's boyhood if you live in a city. To thousands of farm families, it's all in the day's work. Even in June 1940, only 1 out of every 4 farm families could boast electric service from central power stations. (This does not count the farms producing their own electricity.) Five years before, only 1 out of every 10 families was lucky enough to be able to flip electric switches in his home, to start the power flowing from central stations. Government, through the Rural Electrification Administration, can take most of the credit for this advance.

Because rural electrification means better diets for farm families (electric refrigeration), better education for rural children (study lights at school and home), better health on farms (electric pumps provide improved sanitary systems), less drudgery for farm wives (electric washing machines, stoves, water heaters, vacuum cleaners), and equally important, more-advanced farming methods (electric brooders, lighted barns, and such), REA was created 5 years ago to finance the construction of electric distribution systems in previously unserved rural areas. The great bulk of its loans has gone to farmers' cooperatives. Their purpose is to provide light and power at a price farm families can afford.

Though co-ops receive REA loans covering their system's entire cost, there are many farm regions where bringing power lines right to the farmer's door still won't make it possible for him to wire his house for lighting. REA has found many families with incomes below $300 who can't begin to meet the average wiring cost of $75. As REA expands, electrifying these low-income farm homes is becoming REA's chief problem. To help solve it, farmers are setting up self-help co-ops. They help low-income farmers find the cash for wiring and appliances by giving them a chance to help build their own farm lines.

So far, just a handful of self-help co-ops have got started, but there's plenty of evidence on hand to show how they shave expenses.

SOME MINNESOTA FARMERS WENT TO SEE an REA representative about starting a co-op and told him their situation. There weren't very many of them and their farmhouses weren't exactly on top of each other—2 factors which make most rural electrification expensive. Just the same, they needed electricity badly. As one of them said: "It's one thing to read about new kinds of farming and another thing to be able to get the kind of machinery to try it out. We can't go much further till we get power." The REA representative grasped their problem, but he had to tell them that borrowing from REA to build a system in the usual way would be a drain on their future incomes which the gains of electricity couldn't possibly make up. He suggested that they all wrack their brains for ways to build a system they could afford. To start the ball rolling, he outlined the principal features of a self-help co-op.

A self-help co-op gets started like any other. Members come together and sign themselves up. They agree to use electricity when it comes through. They agree to pay the small membership fee (usually $5) which entitles them to one vote per family, and they agree to pay their electric bills, cash on the nose, each month. When organizers of a self-help co-op have a list of potential consumers for their electric cooperative, they can begin to plan how much money they can spend on their system. When they know what their budget is they can start figuring out economies.

PRINCIPAL ECONOMY FOR MEMBERS OF SELF-help co-ops is the one designed to give them an opportunity to earn extra cash for wiring and applicances. To give members this chance, the self-help cooperative makes a special kind of contract with the company which gets the job to build the system.

As in other REA co-ops, bidding is open and the contract is let to the lowest bidder. In the self-help co-ops, however, the bidder must agree to use REA co-op farmers to do all the unskilled labor on the system, to pay them at the prevailing wage rate, until they earn $30 each, and to let them work toward a second $30 if there is further work to be done. On the other hand, REA members agree to turn the checks they get from contractors over to the local cooperative to be applied toward the cost of wiring their farms and the purchase of electrical equipment they want.

To 750 Minnesota farmers this plan sounded good. They figured on building their 250-mile system so their work would come during a slack farm season. They looked for ways to cut costs of the system itself. Before bids were let they did a lot of corner cutting. Biggest economy was in paring costs of poles. When they found good poles would cost $7.50 apiece, they had to think twice before putting that item in the budget. One wise farmer, looking over his land one day, noticed a good stand of sturdy, straight cedars, said to himself, "Darned if we all haven't a good lot of cedar. It ought to make good poles." The idea sounded fair to everyone, including REA representatives. The only drawback was the problem of processing the trees to preserve them. They wanted to be sure the cost of creosoting wouldn't swallow up their savings.

When one farmer remembered a deserted creosoting plant near his place, this worry disappeared. For $1,200 the plant was theirs. The whole deal brought the cost of poles down $5 each, to $2.50 apiece. Farmers who supplied the poles collected cash for their trees which meant added money for wiring and appliances. When a local lumber dealer, inspired by the farmers' success, bought the creosoting plant from them for $1,300 they got a cash windfall which made their poles even cheaper. This economy and others which were planned and written into specifications for contracts sliced about $100 off the $900 per mile cost of REA systems in this densely wooded area where line building runs high.

Ninety-five percent of the members of the Minnesota self-help co-op agreed to wire their houses before the contract was let for the system. Self-help made it possible. Members who wanted to were able to earn at least $30 toward wiring costs. By planning to purchase wiring material and appliances for everyone at the same time, the co-op was able to cut equipment costs to the bone. Minnesota farmers will pay $1.50 for each outlet, as compared with the $2.50 or $3 cost elsewhere.

Group purchasing will save farmers on appliances, too. In Minnesota, they have already signed up for $42,000 worth of electric refrigerators, irons, and other equipment. Buying for all members in one order will save these farmers from 20 to 35 percent.

SELF-HELP PROJECTS ARE UNDER CONstruction in 6 States. Though ways of economizing on the system itself vary in different localities in each instance, members work at digging holes, setting poles, and clearing way for lines. When the $30 or more earned this way doesn't meet the cost for wiring and appliances, REA has additional schemes up its sleeve for showing low-income farmers how to help themselves to light and power. On some self-help systems farmers themselves are becoming electricians. Teachers are supplied by Agriculture's Extension Service or by REA. To insure safe wiring, and to guard against fire and shock dangers all homemade wiring has to be passed upon by an inspector. This inspector, who has no connection with the REA co-op, must be approved by the REA and the county fire marshal.

Home wiring saves farmers the cost of hiring outsiders to do the work. It can reduce the cost of wiring to a fraction of the usual $75 or more. Wiring comes still

COOPERATION means taking active part in the affairs of your co-op. Each household has one vote on co-op policies. REA self-help co-op members put heads together to figure out ways of making power lines cost less. To cut cash outlay they learn to do their own wiring. Buying all members' supplies and appliances at once saves, too.

cheaper with the group purchase of wiring materials.

BEFORE PROJECTS ARE STARTED, FARMERS are queried to find out which ones are going to wire their homes, and which ones are going to buy what kind of appliances. When the co-op knows how much wiring equipment is needed, how many refrigerators, washing machines, and other appliances are wanted, it asks for bids on the whole lot, then buys from the lowest bidder. Chiefly, co-ops try to get what they need at the lowest possible cost. On a number of items they may obtain from REA specifications for equipment and appliances, the use of which can enable farm families to get more for their money. Increasingly, REA is concerning itself with the problem of helping farm families to get the best buy for their money in the group purchase of these materials. Savings as high as 40 percent are reported.

Self-help co-ops bring farmers electricity at minimum cost. Where farms are scattered and prospects of profit are too small to interest private companies, a co-op frequently provides the only hope of escape from primitive pre-electrical conditions. Loans obtained from REA to build systems may cover the entire cost for a power co-op. Interest rates are low (varying from year to year; 2.46 percent for fiscal year 1941; to date, under 3 percent). Interest payments don't start till 30 months after the first advance of loan funds. Repayment of principal doesn't reach its maximum for 7 years after the date of the note. Then co-ops have 18 years more to finish repaying loans.

Like any lender of money, REA has to be sure that its loans will be paid back. To check on loan applications, REA sends examiners to ferret out these facts: How many farm families live in the area to be served by the proposed system? Is the average farm income high enough to support the system, and make it earn enough to repay the loans?

When these questions are satisfactorily answered, the next step is to see that a true cooperative is established to carry out the plans for construction and management which members and REA agree upon. The co-op must admit to membership all farmers, and others, who will use the system. Each family must pay the same small membership fee. Each member is allowed only one vote. The loan bears a fixed rate of interest. If any "profits" are made, as in all true co-ops they must stay in the co-op and be used for the benefit of all the co-op members. Usually this has meant paying in advance on the Government loan, so that the cooperative may enter earlier into full ownership of its electric system. Education in cooperation is developed.

CONSTRUCTION WORK on their own electric system gives these members of an REA self-help co-op a chance to help themselves to electricity. They clear the way for lines, dig holes, set poles, earning $30 or more to help pay for the wiring and appliances which will put electricity to work for them.

RESPONSIBILITY FOR SEEING THAT THESE foundations of cooperation are well laid rests with the co-op's board of directors. The board is elected from the members by the members to oversee the work of the co-op and to determine the policies which govern it. The directors should be men and women elected because of their ability and their devotion to the community. They should be persons who are not in a position to make money on the REA co-op directly or indirectly through business connections.

Carrying out the policies which the members and the board establish is put in the hands of a paid manager. He should be able to make construction and management run smoothly from beginning to end.

Potential REA borrowers who want to get a rough idea of what systems cost, how much they'll have to pay, can use these figures for a start. Average REA systems cover 340 miles, have 825 users, cost $750 per mile, compared with the $1,500 or $2,000 private utilities used to count on. Rates on REA-financed systems are set at a level substantially below former rural levels. Nevertheless all costs, including purchase of power, operating expenses, and interest and amortization charges are provided for. Because interest rates are low and initial cost of lines well under those of private utilities, electric rates for co-op members compare favorably with average rates charged American families who plug in on private utility current.

REA HAS PLENTY OF REPORTS TO SHOW that electricity makes for better farming. They tell how farmers have boosted incomes by installing electricity in homes and farm buildings. Farmers who light their hen houses find that egg production increases. Electric brooders mean fewer chicks are lost. Electric refrigerators mean less waste from food spoilage. Radios bring market news, weather reports, crop forecasts to the farm home, all of which make the business of farming more efficient.

Ways of using electricity to make farming more profitable are needed most by low-income farmers. Many of them can't afford electricity yet, even with REA's help. But REA is now trying to reach lines out to them. As time goes on *Consumers' Guide* will report further progress made on lowering costs of line construction, on reducing the cost of wiring and appliances, and on the big job of getting electricity for every farm family.

Buy Furniture With Care

That goes for anything you buy for the family, but articles that require large capital outlay need special care in selecting. Labels tell little, so the wise consumer learns the points to look for before he invests

"IT'S SOLID!"
"See—it doesn't wobble!"
"Look at the beautiful finish!"
"This will fit into any kind of home!"
"If it doesn't last you for at least 10 years, come back and we'll give you a new one!"

"What? . . . How many springs are there in the cushion? . . . You want to know whether those are mortise and tenon joints? How do we know those nails are going to to hold? . . . Why, lady—you amaze me!"

Label that bit of monolog as a "Conversation Between a Furniture Salesman and the Customer-Who-Knew-What-She-Wanted." Then tack a middle and a happy ending to it and you have the tale of the furniture buyer who knew there was something else in judging a furniture piece besides giving it a gentle shake, patting its sides and surface, then looking sideways at the price tag before making up her mind.

Labels on furniture sometimes give facts about construction, as well as style and price. Laws of some States require labels to tell the kind and amount of stuffing of upholstered pieces. But furniture labels rarely—if ever—set down in 1–2–3 sequence the kinds of joints used in making a piece, the dimensions of the piece, facts about finish, such information as the number of springs and the kind of webbing of upholstered articles, and a declaration as to whether glue, screws, or nails were used for reinforcement.

Likewise, no one has established A–B–C quality standards for furniture: Standards that take into account not only the wood used in the manufacture of the furniture, but also the type of construction, the fabric, and the workmanship. It isn't easy to define the qualities that make for sturdy construction.

One feature of furniture has had a standard worked out for it; that is a standardized measurement of size. Of course, getting the size you want is not the simple matter of asking for the standard size. You should try out different pieces till you get the one that suits you best. Generally, however, furniture that meets the demands of the person 5 feet 8 inches tall will be comfortable for the majority. For the extremely tall or extremely short person, odd sizes can be purchased.

Chairs—that is, all chairs for grown-ups—should be about 18 inches from floor to seat bottom. Depth of the chair—from front to rear—should be about 19 inches. This can be stretched to 24 inches in the case of the heavily cushioned chair. A slight downward slant from front to back of about three-eighths of an inch adds to the comfort. Back of the chair should be 17 to 19 inches from seat to top, and should have a "rake" of 4 inches—"rake" being the distance from the rear of the seat to the point where the back curves outward the furthest. Chair arms 7 inches above the seat will suit most people.

Consider the person who is going to use the chair most before you buy. If he is the "lounging type," then he wants something he can slide down into; if he sits stiff and erect, he wants a more formal chair.

Desk tops for writing should be about 30 to 31 inches from the floor; for typing, about 24 inches. Kitchen and dining room tables can be 33 or 35 inches high. End tables serve most needs when they are 25 inches high.

Furniture pieces built closer than 6 inches to the floor—unless they rest full-flush on the floor—will inevitably be dust and dirt collectors.

Make certain that the piece of furniture is rigid and solid. Wobble the piece on a smooth wood floor. If it yields to your wobbling, and doesn't feel firmly constructed, pass it up. If it sits firmly, you give it a passing grade.

Getting beneath the surface of the furniture is not as simple as determining its comfort and general solidity. You can ask the salesman some questions, and if he is well posted, he may know the answers. Better still, you might ask him to specify on the bill of sale the kinds of joints used in the construction of the piece, the number of springs in an upholstered chair, the kind of webbing, places where there might be nails or glue without reinforcements, kinds of woods in the frame, and the kind of finish. Then if you have cause for complaint later on, you will have no problem in refreshing the salesman's memory. If the salesman doesn't know, you might ask the furniture buyer of the store for the facts you want.

Some stores have factory samples on the floor showing how the furniture looks in cross-section, so that you can tell for yourself how the piece is made once you know what to look for.

Framework of all furniture has joints where legs, arms, body, and reinforcements are fastened together. In the very lowest grades of furniture those joints will be merely nailed together, with perhaps a dab of glue put on to keep the piece in place. That sort of construction is worthless.

Then you will find pieces secured only with screws. This construction is a distinct improvement over nails, but still represents a definite risk, no matter at what price you buy it.

There are 2 kinds of joints which really meet most standards of good furniture construction. The first kind is the mortise and tenon.

Place the knuckle of the middle finger of your right hand between the knuckles of the third and fourth fingers of your left hand and you have the simplest picture of a mortise and tenon joint. In the case of furniture the "knuckle" to be inserted is shaped from the rung or leg that is being joined to another part of the frame in which a hole has been drilled. If the joint fits perfectly, and if a proper glue is used, then the chances of the joint giving way are slim.

The second kind of well-constructed joint is called the dowel. The dowel is nothing more than a wooden peg used to join two pieces of wood together which have previously been drilled with openings the exact size of the peg. Both the holes and dowels are swabbed with glue, and the dowel inserted. It is extremely important that the dowels be of well-seasoned wood and fit tight to avoid shrinkage; otherwise, the joint will become loose. The best kind of dowel has spiral and longitudinal grooves cut into it to reinforce its hold. Steel dowels—which are a kind of over-sized nail—should be avoided.

"Doubled-dowel" construction simply means that 2 dowels instead of one have been placed on either side of a joint, thus strengthening the joint. It is always to be preferred to the single-dowel type.

There are 2 schools of thought on this feature of a piece of furniture, one favoring the dowel construction, the other the mortise and tenon. Both types, properly used, mean good workmanship in furniture, and in a well-made piece you often find them used in combination. Sometimes screws are used to reinforce them, in which case the screws do not mean cheapened construction.

ASK THE SALESMAN TO TURN THE PIECE you are considering upside down. Then look for corner blocks, which are nothing more than small triangular-shaped pieces of wood placed at the joint for reinforcement. Badly made furniture may lack corner blocks altogether or else have them glued or nailed to the piece in haphazard fashion. You want corner blocks notched to fit the joint and attached with screws. Grain of the corner blocks should run diagonal to that of the wood they reinforce. In some chairs—notably the bentwood types—lack of corner blocks is not a sign of inferior construction since they would be impractical to use.

Type of glue used in the joints is almost impossible to determine. But there are good glues—and bad ones. Best glue is a new type of adhesive that goes under the chemical name of phenolic-resin, which is really a generic name for a group of related glues. Heat-resistant and water-resistant, these are among the strongest glues used in furniture making. Expensive, they are not used in low-cost pieces. Animal casein glues—made from milk—and vegetable glues—made from starch—are also commonly used in furniture. Both rate high, but animal casein glues are more resistant to water.

One way to spot bad workmanship is to notice whether glue has oozed out along joints or corner blocks and dried in a brittle mass that flakes off under your fingernail. That means not only sloppy construction but also a poor quality glue.

Likewise, you're taking chances with a piece whose joints are not compactly set or where small cavities in the joint betray a poor glueing job.

WITH THE DESK OR TABLE OR SOFA TIPPED on end, that is the time to examine bottom surfaces to see that they are sanded smooth, not rough and splintery, and are shellacked or similarly finished. This is the time, also, to look for nails, poorly glued joints, and split panels where screws have not been properly inserted. Notice the grain of the legs of chairs and tables. If it does not run vertically, following the longitudinal axis of the leg, but runs diagonally, it may mean future trouble due to breaking across the grain.

Now turn the piece right-side up.

If the piece has drawers in it, pull them out and see for yourself if they slide smoothly and are not loose. The groove rail of the drawer, on which the drawer slides back and forth, should be glued or otherwise fastened securely to the framework. Slides, whether on both sides of the drawer or in the center, likewise should be securely fastened to both the front and back of the drawer.

Dove-tail joints, used for notching together the sides of the drawer, should fit snugly and firmly. Good-quality furniture has this type of joint on all four corners of the drawer; cheaper pieces may simply have slots in which the sides and back of the drawer are fitted. Tiny blocks of wood glued to the bottom of the drawer, where it fits into the sides, make for reinforcement and strength. If the back of the drawer falls below the bottom of the drawer floor, it indicates good workmanship.

WHEN YOU PULL OUT THE DRAWERS, look for a panel shelf that is at least three-sixteenths of an inch thick separating each drawer. Furniture lacking this insert will not be dustproof.

Like drawers, doors should fit snugly, should open and close smoothly, should not sag. Hinges, brackets, latches made from thin, stamped-out metal mean weak construction that will not long stand the strain of ordinary wear.

Table leaves also should fit perfectly, with not even a fraction of an inch looseness. Don't store them in damp places, such as your cellar; if you do, you will soon have warped, useless furniture on your hands.

What holds for the framework of simple wooden furniture holds for the frames of upholstered pieces. But your troubles become many-fold more complicated when you look for quality in an upholstered piece.

To know the anatomy of an upholstered chair or sofa, you examine the cross-section bottom-side-up. Many stores have samples in their showrooms already slit open so you can see their innards.

First there is the undercovering, which is nothing more than a plain piece of cloth tacked on to the bottom to cover webbing, springs, and stuffing.

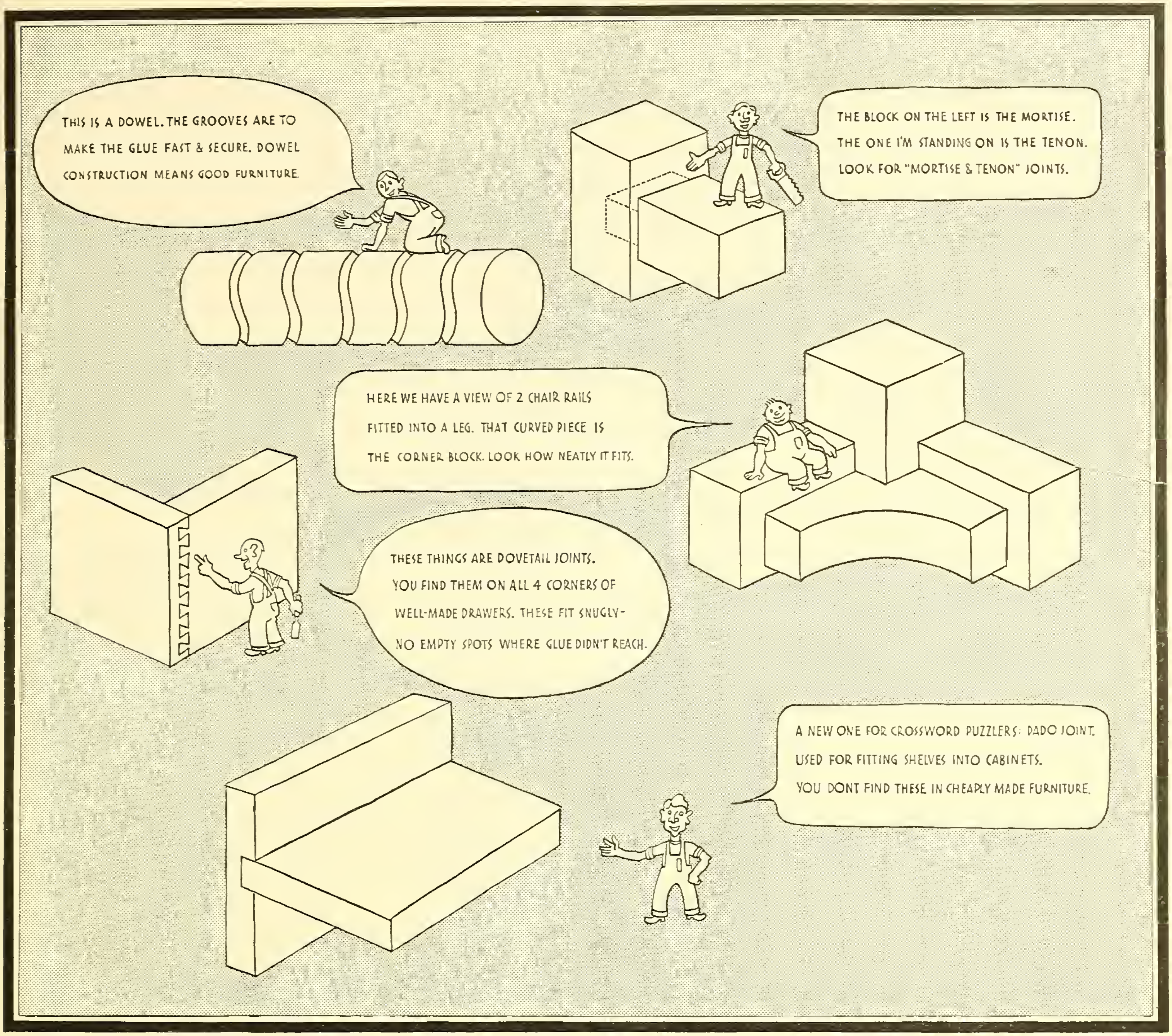
Rip that off and you find the webbing. Job of the webbing is to support and reinforce the springs. Best webbing is firm, closely woven, strong. It should be at least 3¼ inches wide. Finest grades usually have a red stripe near the edge, cheaper grades a blue or black stripe. Those are grade designations familiar to the trade but seldom explained to consumers. The strips of webbing are interwoven with each other, and the edges are securely tacked to the frame. You can spot cheap construction by wide spaces between webbing, and by loose, sleazy fabric. Better grades will have from a third to a half more webbing strips than cheap grades.

THERE ARE THREE SUBSTITUTES USED ON lower-cost chairs for fabric webbing. All of them are weaker than webbing or subtract from the comfort of the chair or sofa.

So-called "sagless" construction is nothing more than a covering of heavy jute material stretched across the bottom of the chair and fastened to the frame by tiny springs. "Supersagless" construction is the same thing with the addition of two heavy metal wires stretched beneath the jute to lend support.

Wires or flat steel bands may be used in place of webbing. Found only in lowest-quality furniture, these may soon bend out of shape, causing the chair to sag. The better quality wires or bands may retain their shape, but result in a less-comfortable chair, and are always used with less-resilient springs.

Wooden slats are sometimes used because of their strength, but they give you a chair with less resiliency and comfort.


THIS IS A DOWEL. THE GROOVES ARE TO MAKE THE GLUE FAST & SECURE. DOWEL CONSTRUCTION MEANS GOOD FURNITURE.
THE BLOCK ON THE LEFT IS THE MORTISE. THE ONE I'M STANDING ON IS THE TENON. LOOK FOR "MORTISE & TENON" JOINTS.
HERE WE HAVE A VIEW OF 2 CHAIR RAILS FITTED INTO A LEG. THAT CURVED PIECE IS THE CORNER BLOCK. LOOK HOW NEATLY IT FITS.
THESE THINGS ARE DOVETAIL JOINTS. YOU FIND THEM ON ALL 4 CORNERS OF WELL-MADE DRAWERS. THESE FIT SNUGLY-NO EMPTY SPOTS WHERE GLUE DIDN'T REACH.
A NEW ONE FOR CROSSWORD PUZZLERS: DADO JOINT. USED FOR FITTING SHELVES INTO CABINETS. YOU DONT FIND THESE IN CHEAPLY MADE FURNITURE.

Next come the springs. The larger springs are, the greater the resiliency and comfort of the chair. Double-cone springs are better than single-cone. Experts say 9 to 12 double-cone springs should be counted on the bottom of an ordinary good quality chair, 16 or more if the chair is very large. The springs should be close enough to prevent sagging or hollows developing in the chair with use, yet not so close as to touch or lock when someone sits in the chair.

Secret of the efficiency of springs is the way in which they are fastened to the frame. Strong hemp twine should be used to fasten each spring to the back and front of the frame. Wire is second-best, but better than bad-quality twine.

Poor-quality furniture has only 3 or 4 strings fastening each spring to the frame, usually placed at front, back, and either side. Better service is had when each spring has eight separate knots which support it diagonally as well as on the 4 opposite sides. The knots should be neither too loose nor too tight. A good test is to press down the springs and see whether they resume their normal position as one unit, instead of one spring being depressed farther down or returning to a lower position than the others.

As you dig deeper into the chair, you next find on top of the springs a layer of burlap or heavy cotton fabric, which in good furniture is sewed to the springs. Best-quality burlap is 10- and 12-ounce, poorer quality the 8-ounce grade.

Then comes the stuffing—put in 2 separate layers on high-grade pieces.

There are any number of stuffings, and in some States consumers find the kind and percentage of each is stated on the label because the law says those facts must be there. That's to prevent consumers from getting insanitary or used filling. Stuffing should be quilted or sewed to the burlap underlining to prevent its shifting and massing in one spot of the chair.

Best-quality furniture has stuffing of long, curled horsehair; medium grades have Spanish moss, or cheaper grades of cattle hair, or a combination of moss and hair; in the lowest grades are palm-leaf fiber, sisal, coco fiber, tow, and excelsior. The fillings rank in about that order for resilience, comfort, and wearing qualities.

Finally, there is the padding to give form and shape to the piece and to prevent springs or frame from breaking through the upholstery fabric. Firm rolls of cotton felt, attached to the frame, are best. Padding of lumpy cotton or twisted paper soon loses shape, makes the chair uncomfortable.

A muslin cover beneath the upholstery fabric is a sign of quality. *Consumers' Guide* for December 5, 1938 (Vol. V, No. 13), tells how to select upholstery fabrics.

If you like cushions with springs, follow the same rules for judging quality in them as judging the springs underneath the cushion.

Cushions with filling should first of all have a downproof ticking. The label should tell you what the filling is. Best grades have 75 percent goose down and 25 percent small goose feathers. Cushions 100 percent down don't have as much body as the mixture.

Duck, chicken, and turkey feathers are found in medium-grade furniture. They rank in that order for softness and durability. Kapok, cotton, and cotton linters go into the lowest-grade pieces. Often these tend to lump or to become powdery.

FINISH OF ALL WOODEN EXPOSED PARTS of the furniture should be smooth, free from rough spots, and unless intended to simulate a special design, clear enough so as not to hide the natural grain of the wood. Try this test to judge the quality of the finish: Scratch a small unexposed part of the finish with your fingernail. If a white mark is left on the finish, it indicates a cheap, inferior product that is brittle. Rub part of the finish with your thumb for several seconds until the coating gets warm. Cheap finish will turn to powder or become sticky under the test.

What you will get out of furniture depends to some extent on what care you put into it. A few general hints: Dust furniture daily and polish or wax it often. Don't place fine woods near radiators, open windows, or in direct sunlight. Keep extension leaves in a cool, dry place. Use asbestos or other hot-dish pads on table and server tops to protect them against damage from heat. That holds even for finishes said to be moisture- and heat-proof. Call in a professional repairman if wood cracks, or if joints become loose.

SPECIFICALLY, USE SOFT CHEESECLOTHS, or any other kind of soft cloth for dusting. Don't use an old, dirty cloth, and don't use one that leaves lint. Wash furniture with "green soap," a vaseline-like cleanser sold in most drug stores. Put a teaspoonful of it on a soft cloth soaked in hot water, and rub it on the polished surface until heavy lather is worked up. Then take another cloth dampened in tepid water, wipe the surface clean, completing the job by wiping it a second time with a soft dry cloth. Always rub the wood with the grain. White soap that is pure and neutral will do the job just as well, but be sure it is not an alkali soap.

If highly polished furniture becomes "foggy" make a mixture of a quart of clear water and a tablespoon of vinegar and apply it to the surface, being sure to rub with the grain.

White spots on furniture that has been finished with shellac may sometimes be removed by rubbing lightly with a soft cloth moistened with denatured alcohol diluted half and half with water, but alcohol should be used with care to avoid cutting through the shellac coating. If the finish on the furniture is varnish, white spots can usually be removed by rubbing lightly with a piece of flannel dampened with essence of peppermint or spirits of camphor, followed after a few minutes with an application of furniture polish.

Scratches usually must be repaired by a specialist. But if you are artistically inclined, you can do the job yourself by applying a tint slightly lighter than the wood to the scratch, being careful not to overdo the application. Then fill in the scratch with white shellac, using a white camel's hair brush. Use light, delicate strokes to avoid leaving a lump on the finish.

Pineapple Parable

"LUNCH FOR NINETEEN, please, and I'd like to talk to the chef about the dessert."

To the kitchen staff of a large New York hotel the luncheon order that followed must have sounded slightly odd. Dessert, they were told, was to be 2 slices of canned pineapple, each served in a different colored dish. Great care was to be taken in preparing this so that the luncheon guests were to be served one slice from one brand of pineapple, one slice from another, both specified by the man who ordered the luncheon.

In due course the 19 guests assembled. It turned out that they were not to eat alone, but their hosts were members of a marketing association. They were not ordinary luncheon guests. All 19 of them were handpicked housewives supposedly representative of their income group. All in all it was to be a gay party, because topping off the meal was to be a consumer quiz at which the consumer I. Q. of these especially invited guests was to be exposed to the critical view of their 200 hosts.

QUESTIONS CAME HARD AND FAST TO THE 19 guests. How many of them had read this or that book on consumer problems? How many of them knew about the *Consumers' Guide?* Confronted with three pairs of stockings, they were asked to state which of the three they preferred. The informatively labeled pair with no brand name, the brand product without the label, and a pair completely devoid of any identification. A similar set of questions had to do with canned beans. There were questions about advertising, and other consumer problems.

Came time for the dessert, and the waiters marched out with the double set of dishes for each diner. "Eat both pieces of the sliced pineapple just as you would eat any dessert," the 19 guests were requested, "but please remember which colored dish each of the slices came from." They ate the dessert and when they were through each housewife was asked to vote on which slice of pineapple tasted better, identifying her choice by the color of the dish the slice came from. Sixteen voted for one kind, 3 for the other kind. Of course, none of them knew which brand was which. It was a sort of consumer blindfold test.

ANNOUNCING THE RESULT OF THE DESSERT course, the person responsible for the contest said 16 of the women had voted for a Grade "B" product, 3 of them for a Grade "A" product.

Now that was news. It was news for the reporters who sat in on the luncheon, and it was news for the Department of Agriculture.

One reporter, for example, had this to say: "The assembly burst into hearty laughs on being informed that when unbranded slices of pineapple in separate dishes, carefully checked as to contents, were served to the women, 16 of the 19 had preferred the Grade B, by Government standards, to the Grade A." That was important enough to go into the newspaper headline, which reported the affair this way: "Sixteen Pick a Grade B Pineapple Over U. S. Grade A."

To the Department of Agriculture, this news was even more startling. It was startling because *no U. S. grades for pineapple have ever been developed, either in their tentative or permanent form.*

Off to the director of sales research of a large food company, who staged the pineapple contest, went a letter from the Department, saying in part: "We would be keenly interested in having any explanation you may have to offer in connection with this rather unfortunate incident which upon the face of it reflects unfavorably upon Government grades, but when the facts are known, does not."

From this gentleman came a letter in return telling "How chagrined I am over my ignorance of the fact that no official grades have ever been established for pineapple. I thought they had, and the whole misunderstanding arose from that ignorance, for which, of course, I am solely responsible . . ."

The newspaper has been asked to correct the misstatement of fact as a reassurance to consumers whose belief in Government grades may have been undermined by the item. Meanwhile, consumers, canners, and trade editors who queried the Department of Agriculture about the incident have been set right.

The kind of pineapple the women preferred sells at a lower price than the other kind. Perhaps there's a moral in that.

MILK GLOSSARY FOR CONSUMERS

(Concluded from page 7)

Bacteria produce various effects. The souring of milk is a result of the presence of the lactic acid bacteria. These are good bacteria; they help in the digestion of food. Physicians sometimes put them to work for reasons of health by prescribing milk for patients which has been treated with cultures of these bacteria.

Other varieties are necessary in butter manufacture and induce the changes which result in butter flavor; still others ferment milk, while others bring about color changes in milk.

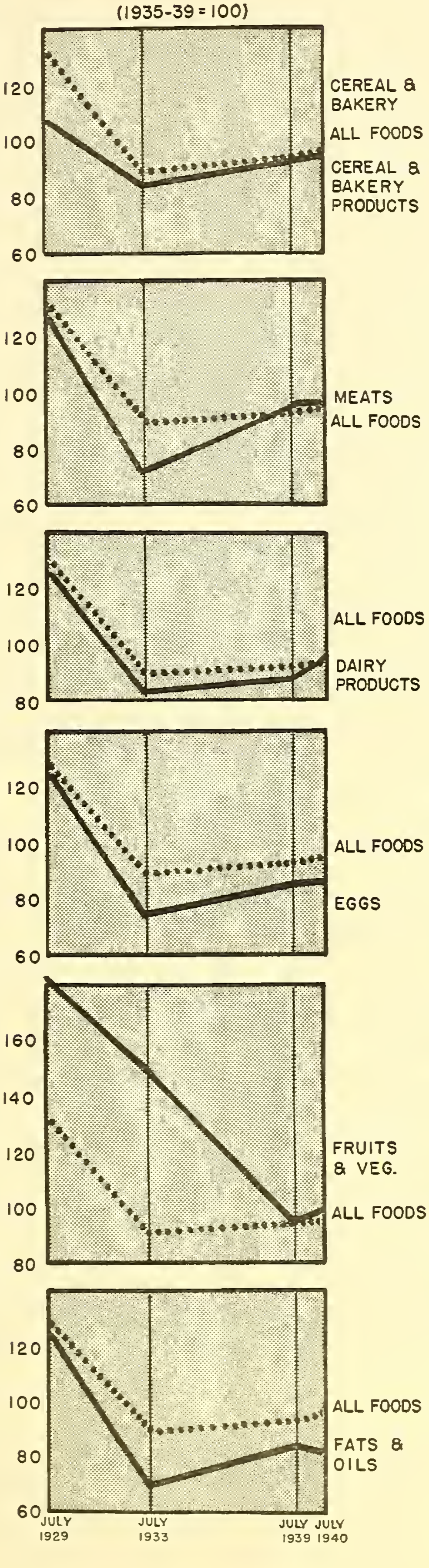
Bacteria in milk may also produce disease, notably tuberculosis, septic sore throat, undulant fever, certain intestinal disturbances, diphtheria, and scarlet fever. Fortunately, these bacteria succumb to proper pasteurization.

Disease-bearing bacteria get into milk from diseased cows, from dirt on the cow, from dirty barns, careless handling, and diseased handlers.

Regulations looking toward pure milk, therefore, not only provide for pasteurization which kills harmful bacteria, and refrigeration which retards the growth of bacteria, but also protect the health of cows and the sanitary handling of milk, which greatly reduces the opportunities for infection.

YOUR FOOD SUPPLIES AND COSTS

A PERSPECTIVE



FOOD COSTS. Retail food costs declined from June to July, checking the upswing which has been underway since early this year. This decline, as well as the earlier increase, was mainly the result of changes in fruit and vegetable prices. Reductions in these items from June to July were large enough to more than offset seasonal increases in prices of meats and eggs.

In mid-July food costs were 3 percent higher than a year ago. Nevertheless, outside of 1939, they were the lowest for July since 1934. All food groups except beverages, and fats and oils were priced higher than in July 1939. But increases were marked, only in fresh and dried vegetables, dairy products, and cereals (bread and flour). Compared with most recent years, food costs thus appear to be relatively low.

FOOD SUPPLIES. Plentiful food supplies for the 1940–41 season are indicated in the latest check on the national food situation made by the Department. According to this survey prospects for this season compared with last year's big supplies are as follows:

INCREASES: Lard, dairy products other than butter, rice, fresh and canned fruits.

LITTLE CHANGE: Meats, canned and fresh vegetables, wheat, potatoes, dry beans.

SMALLER: Poultry, eggs, dried fruits, sweetpotatoes, butter.

Most of these changes are small and supplies of most foods are expected to be in line with those of recent years.

APPLES. Supplies probably will be considerably smaller than last year and below average.

MELONS. Cantaloup and watermelon supplies during the remainder of the season probably won't differ much from a year ago.

MEATS. Seasonal increases in pork, beef, and lamb supplies are in prospect for September. More lamb, about the same amount of pork, and slightly less beef is the outlook for this period.

FRESH VEGETABLES. More cabbage, about the same amount of potatoes, and less onions than last year are expected this fall and winter.

EGGS. September supplies probably will be smaller than last year, as well as seasonally smaller than in August.

IN THIS ISSUE

VOLUME VI, NUMBER 19 ● AUGUST 1940

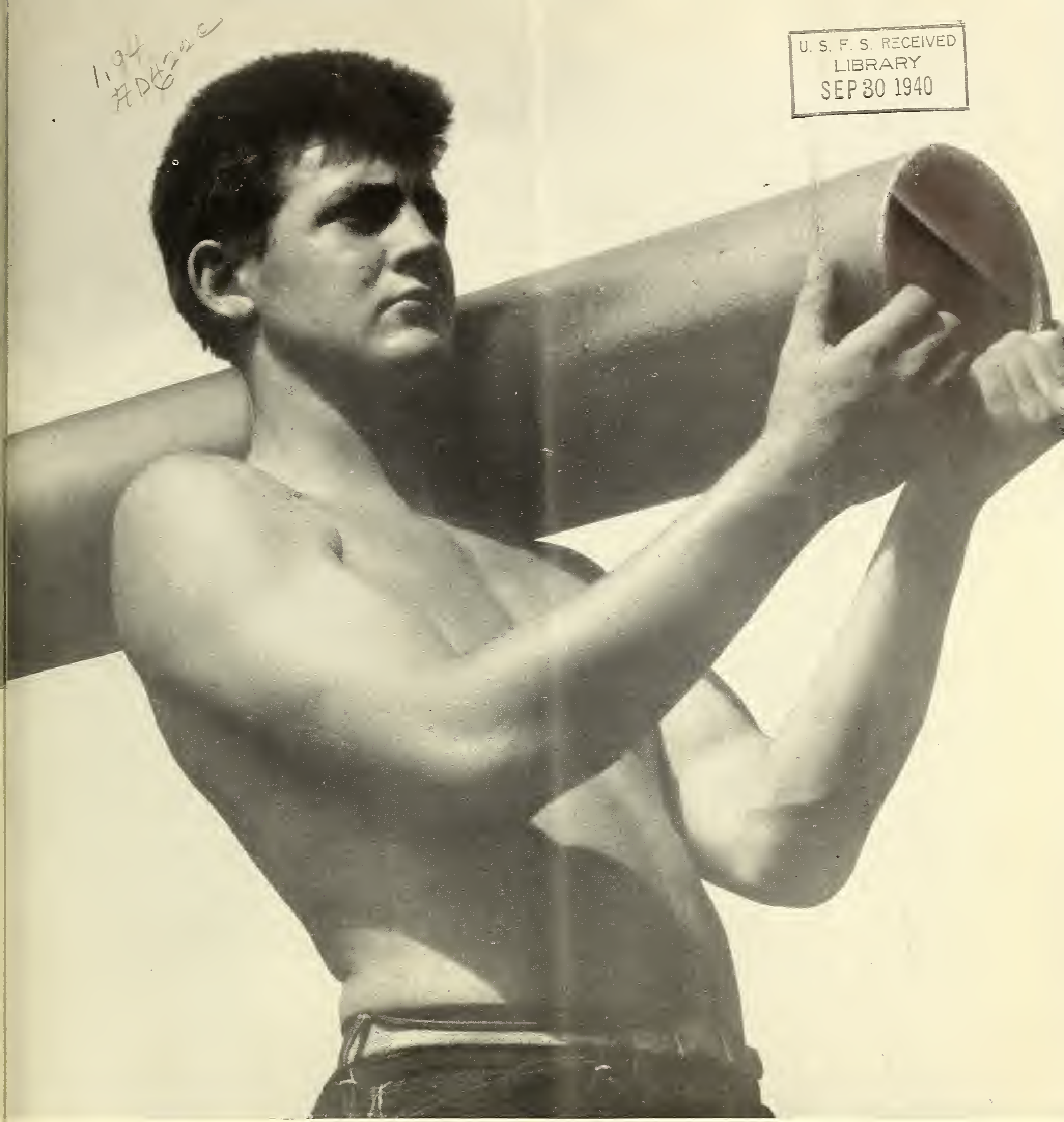
Homespuns for Farm Homes 3
Milk Glossary for Consumers 6
Self-help Cooperatives Turn the Trick . 8
Buy Furniture With Care 11
Pineapple Parable 14
Your Food Supplies and Costs 15

U. S. GOVERNMENT PRINTING OFFICE 252980°

For sale by the Superintendent of Documents, U. S. Government
Printing Office, 5 cents per copy, 50 cents per year, 80 cents, foreign.

1.94
AD42C

U. S. F. S. RECEIVED
LIBRARY
SEP 30 1940



FOOD AND NATIONAL DEFENSE ISSUE

CONSUMERS' GUIDE

WE HAVE a job to do. You, and I, and everyone. Our job is this: To make America strong.

We have our lands to hold, our waters to protect, our skies to guard. We have these, but we have more. We have people.

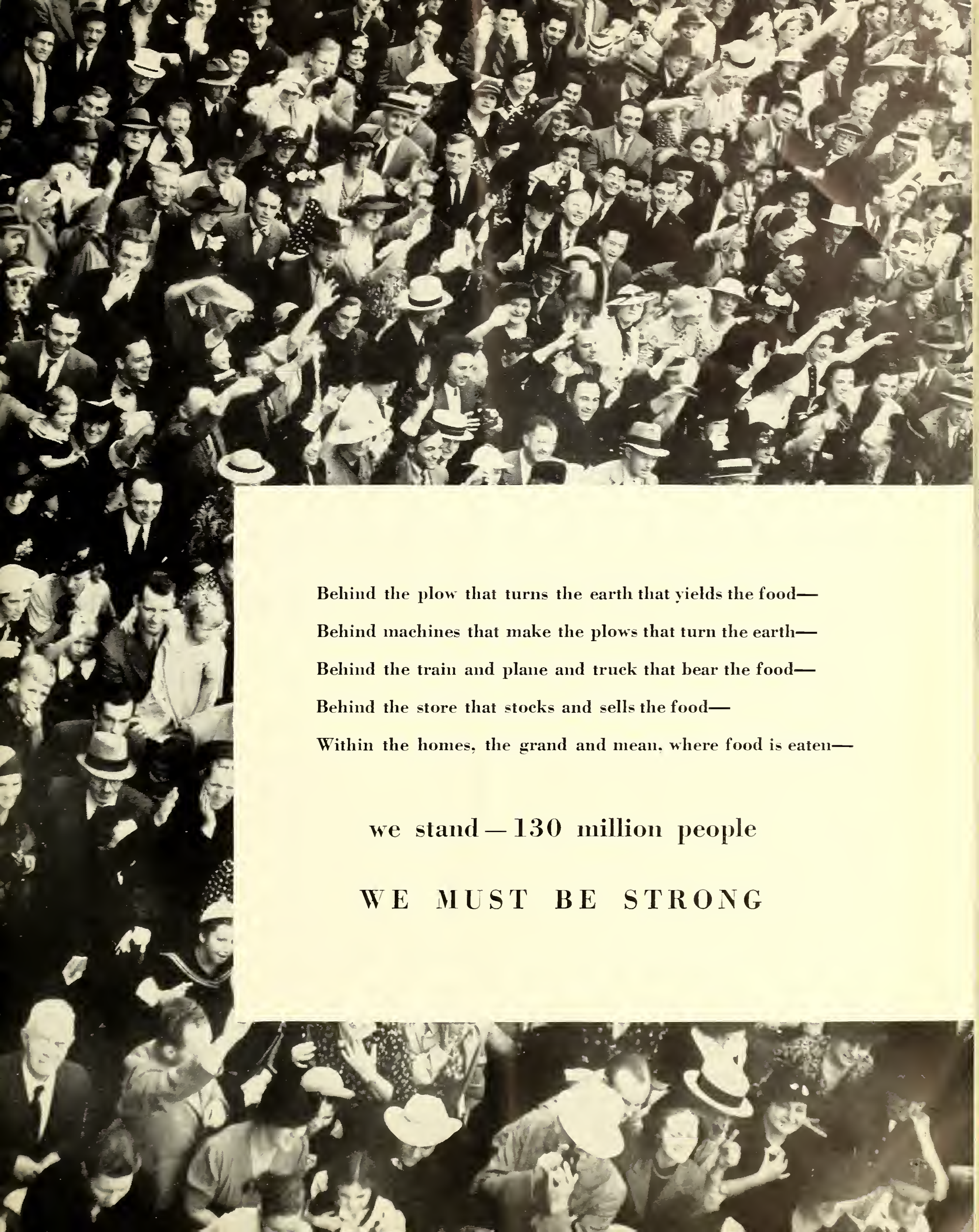
We are rich in people. People who love and cherish our lands. People who know how and want to work. People who have deep faith that here we have the greatest chance for life, and liberty, and the pursuit of happiness. People who know the fight for these is never won until it is won for everybody.

Defense is planes and guns. It is equipping an army to man our military weapons. It is this, and more. It is building the health, the physical fitness, the social well-being of all our people, and doing it the democratic way. Hungry people, undernourished people, ill people, do not make for strong defense.

This, then, is our job, not all of it, but a vital part: Let us make every American strong, stronger than ever before, sturdier in body, steadier in nerves, surer in living.

Harriet Elliott

HARRIET ELLIOTT,
Consumer Commissioner,
National Defense Advisory Commission.



Behind the plow that turns the earth that yields the food—
Behind machines that make the plows that turn the earth—
Behind the train and plane and truck that bear the food—
Behind the store that stocks and sells the food—
Within the homes, the grand and mean, where food is eaten—

we stand — 130 million people

WE MUST BE STRONG

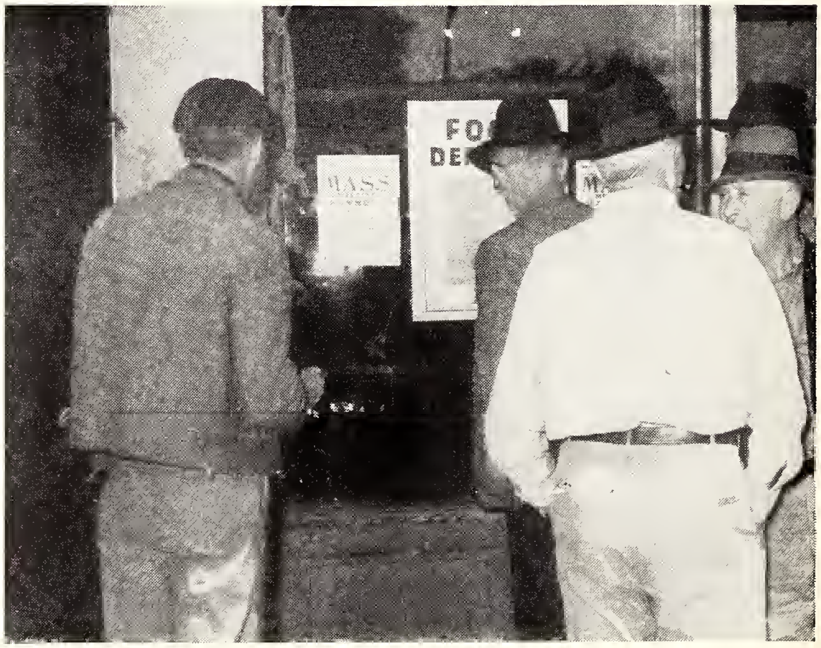
We are not strong enough now

45 million of us live below the safety line because we do not get the food we need

BELOW the safety line—because some of us don't earn enough. We must be helped.

BELOW the safety line—because some of us don't know the foods we need. We must be taught.

BELOW the safety line—because some of us with land don't grow food for our families. We must learn how.



BELOW the safety line—because some of us don't care enough. We must be roused.

Below the safety line means this

Bodies that tire too easily

Bodies with minds
that are slow to think

Bodies too weak
to fight disease

THERE'S DANGER BELOW THE SAFETY LINE

These breed danger

Meals that leave the body hungry
Meals that are not well planned
Meals that are tasteless
Meals that neglect protective foods

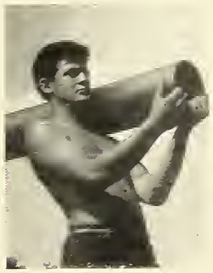
UNBALANCED meals may not show their effects for years, and when they do, it sometimes is too late.

BAD eating habits learned in childhood may mean grown-ups handicapped for long years ahead.

FOOD that is vitamin and mineral poor may cheat a body of its chance for vigorous and sturdy health.

These breed safety

Meals that are ample
Meals that are well balanced
Meals that taste good
Meals that provide an abundance of protective foods



FOOD IS STRENGTH

STRONG, straight bodies that can carry the load of a hard day's work are built with well-balanced meals.

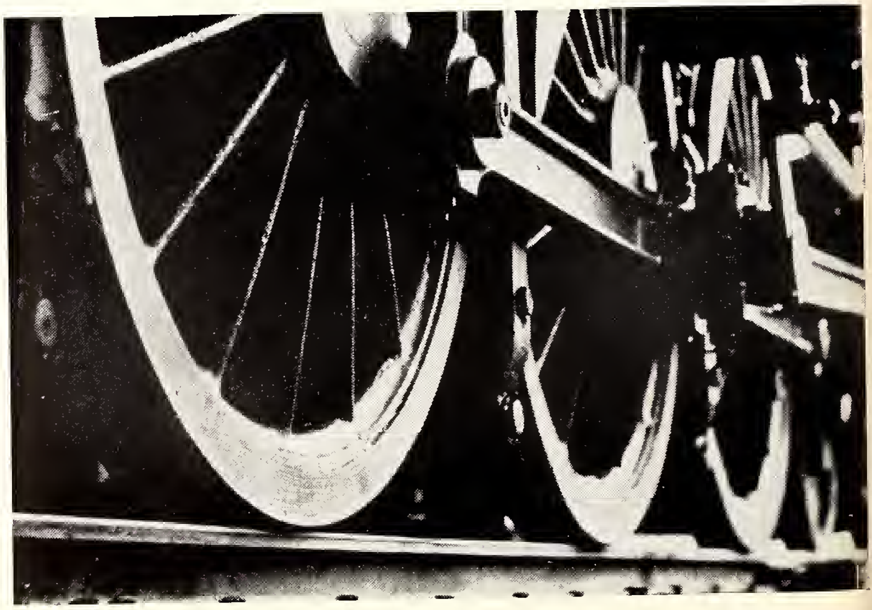
ONE LIFE, and sometimes many lives, depend on eyes that are sharp and sure. Protective foods help keep eyes strong.

NERVES that are steady, firm, and unafraid grow in bodies fed with foods well-balanced and abundant.

All of us can liv

We have the lands it takes
to grow the food and all the kinds of food we need

We have the machines it takes
to grow and move and market all the food we need

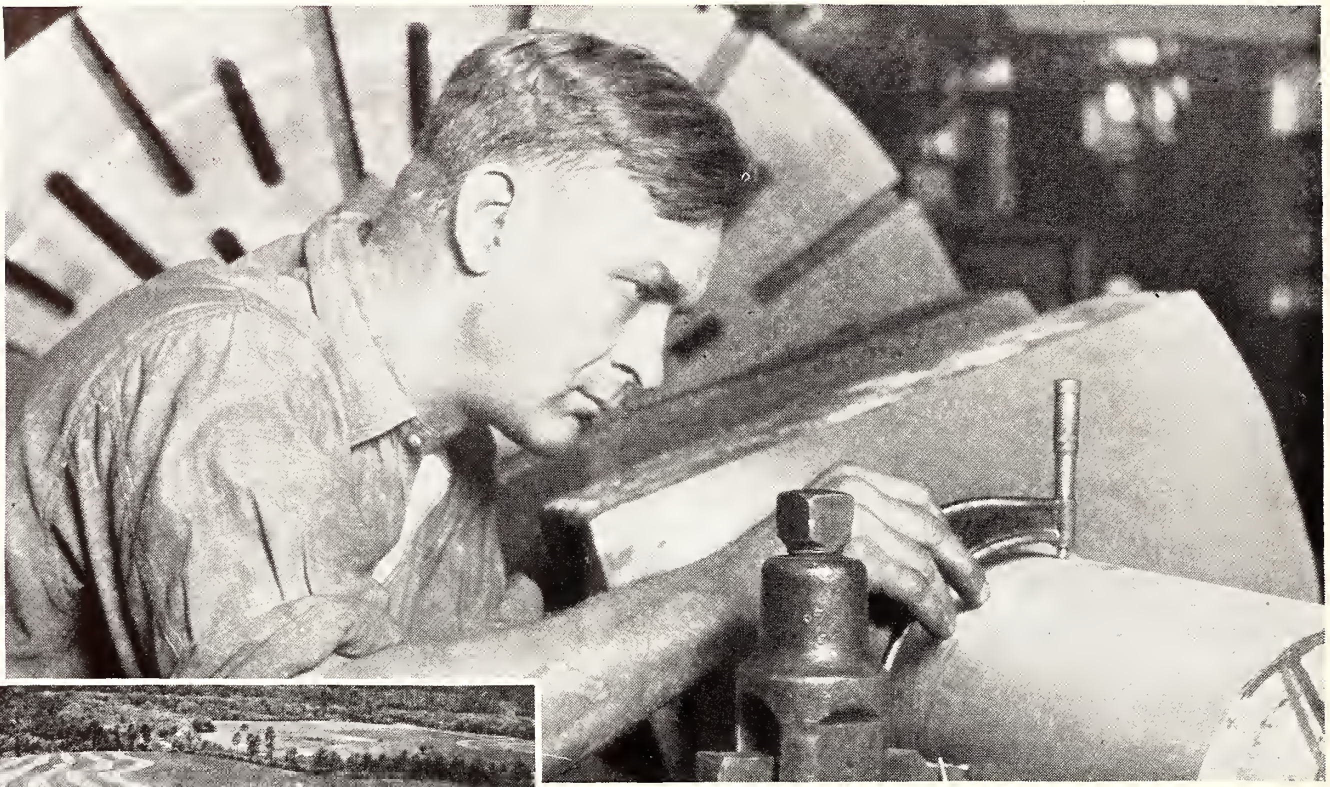


above the safety line

We have the hands it takes
to plant and harvest, pack and sell the food we need

We have the brains to use our lands, to use our hands, to make and use machines. We have the brains it takes to make lands, hands, and machines all work together. That way safety lies.

Here is the route to safety



EVERY pair of hands, willing and able to work, must have its chance to work; every idle machine, able to turn out useful goods, must be made to turn, because lands and hands and machines that work together produce the wealth that makes it possible for people to buy or grow the food they need.

WE CAN USE our land and conserve it, too. But people who must buy their food cannot buy unless they have the money to buy. We must guard the wages and build the buying power of all who work.

UNTIL wages and incomes can buy all the food that farmers produce and consumers need, we must salvage the surplus and route it where it's needed. School lunches, stamp plans, relief food distribution, and ever-normal granaries lead the way. They must go on.

WE MUST get the facts of food to everyone: How foods give strength, how they are grown and move to market, what ways there are to get more foods in market baskets at lower cost, how dollars spent for foods can buy more nourishment and strength.

This is a job for a nation of people

—and in it there is work for you

WITH YOUR NEIGHBORS

YOU CAN GET a municipal radio market news service started in your city, so household buyers will know what foods are good buys and cheap each day.

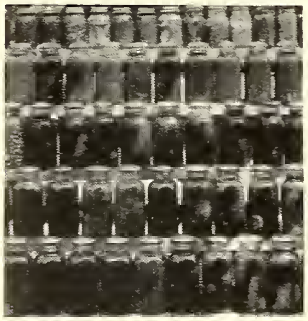
YOU CAN START a school-lunch program in your city, and see that every school child has at least one well-balanced and adequate meal each day.

YOU CAN WORK for low-cost ways of selling milk and fruits and vegetables so that those who have to pinch can buy a greater abundance of them.

YOU CAN SET UP diet clinics where families can bring their food-buying problems and talk them over with experts in nutrition and consumer buying.

BY YOURSELF

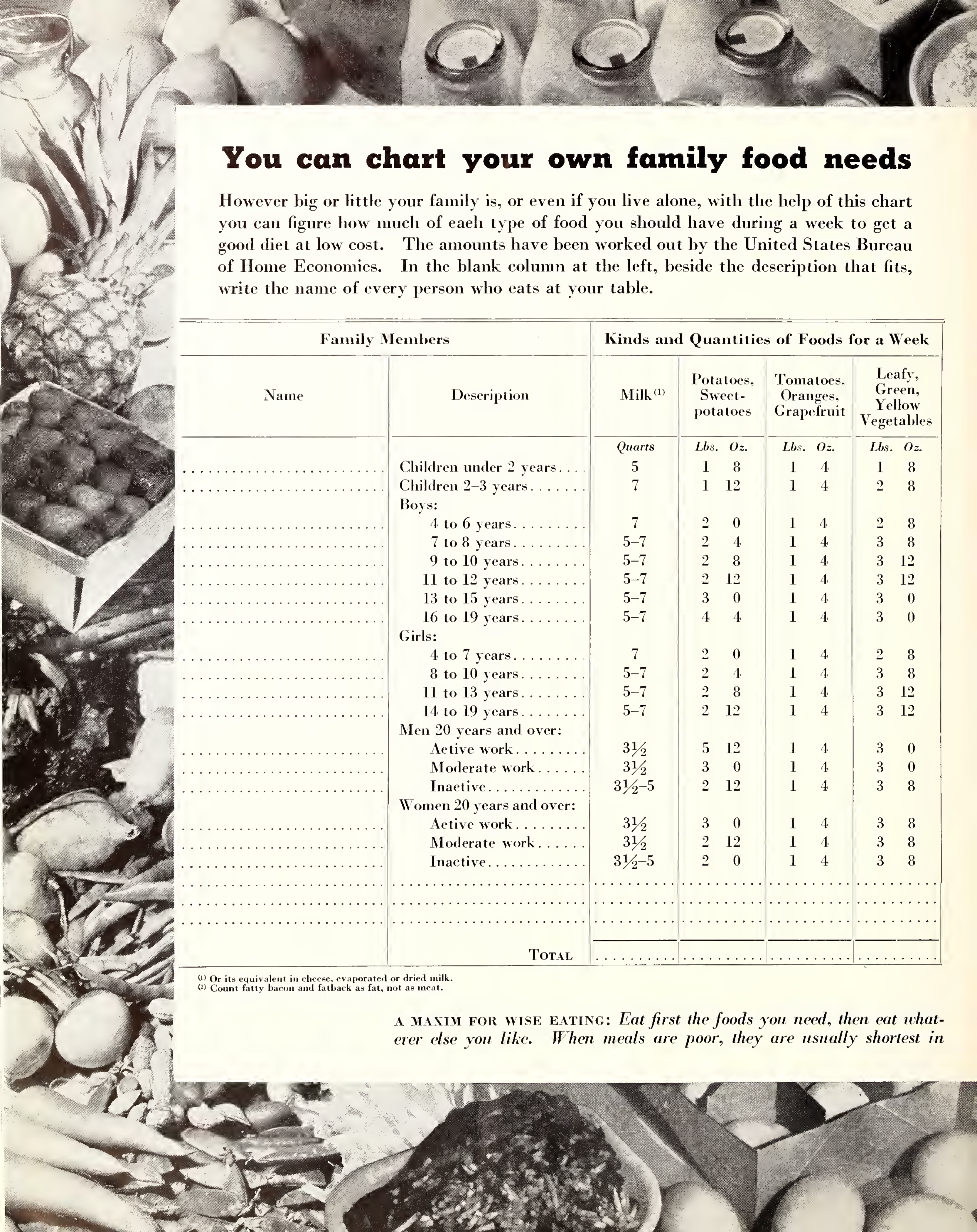
YOU CAN SUPPORT the Food Stamp Plan, now in 150 cities; help needy families to use and understand it; encourage merchants to sell surplus foods at lowest price.



YOU CAN LEARN, if you have land, how to grow the foods you cannot buy, preserve the foods you cannot immediately use, and plan for balanced meals throughout the year.

YOU CAN URGE your merchants to sell Government-graded foods, and urge consumers to buy by grade so they will get the quality they want for the money they can spend.

YOU CAN KNOW what your local, State, and National governments are doing to help get safe meals to more people.



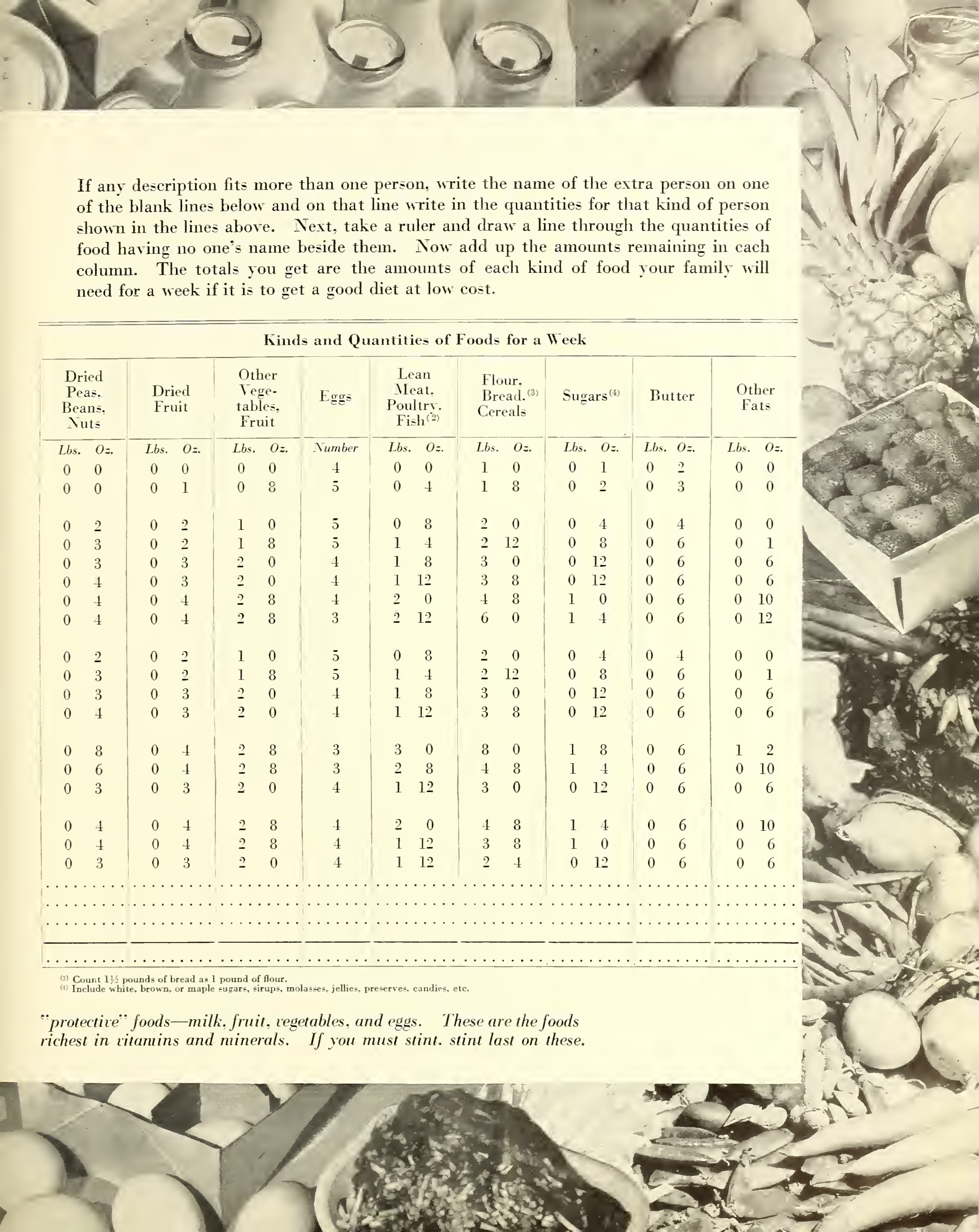
You can chart your own family food needs

However big or little your family is, or even if you live alone, with the help of this chart you can figure how much of each type of food you should have during a week to get a good diet at low cost. The amounts have been worked out by the United States Bureau of Home Economies. In the blank column at the left, beside the description that fits, write the name of every person who eats at your table.

Family Members		Kinds and Quantities of Foods for a Week						
Name	Description	Milk (1)	Potatoes, Sweet-potatoes		Tomatoes, Oranges, Grapefruit		Leafy, Green, Yellow Vegetables	
		Quarts	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*
	Children under 2 years	5	1	8	1	4	1	8
	Children 2–3 years	7	1	12	1	4	2	8
	Boys:							
	4 to 6 years	7	2	0	1	4	2	8
	7 to 8 years	5–7	2	4	1	4	3	8
	9 to 10 years	5–7	2	8	1	4	3	12
	11 to 12 years	5–7	2	12	1	4	3	12
	13 to 15 years	5–7	3	0	1	4	3	0
	16 to 19 years	5–7	4	4	1	4	3	0
	Girls:							
	4 to 7 years	7	2	0	1	4	2	8
	8 to 10 years	5–7	2	4	1	4	3	8
	11 to 13 years	5–7	2	8	1	4	3	12
	14 to 19 years	5–7	2	12	1	4	3	12
	Men 20 years and over:							
	Active work	3½	5	12	1	4	3	0
	Moderate work	3½	3	0	1	4	3	0
	Inactive	3½–5	2	12	1	4	3	8
	Women 20 years and over:							
	Active work	3½	3	0	1	4	3	8
	Moderate work	3½	2	12	1	4	3	8
	Inactive	3½–5	2	0	1	4	3	8
	TOTAL							

(1) Or its equivalent in cheese, evaporated or dried milk.
(2) Count fatty bacon and fatback as fat, not as meat.

A MAXIM FOR WISE EATING: *Eat first the foods you need, then eat whatever else you like. When meals are poor, they are usually shortest in*



If any description fits more than one person, write the name of the extra person on one of the blank lines below and on that line write in the quantities for that kind of person shown in the lines above. Next, take a ruler and draw a line through the quantities of food having no one's name beside them. Now add up the amounts remaining in each column. The totals you get are the amounts of each kind of food your family will need for a week if it is to get a good diet at low cost.

Kinds and Quantities of Foods for a Week

Dried Peas, Beans, Nuts		Dried Fruit		Other Vegetables, Fruit		Eggs	Lean Meat, Poultry, Fish⁽²⁾		Flour, Bread,⁽³⁾ Cereals		Sugars⁽⁴⁾		Butter		Other Fats	
Lbs.	*Oz.*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*	*Number*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*	*Lbs.*	*Oz.*
0	0	0	0	0	0	4	0	0	1	0	0	1	0	2	0	0
0	0	0	1	0	8	5	0	4	1	8	0	2	0	3	0	0
0	2	0	2	1	0	5	0	8	2	0	0	4	0	4	0	0
0	3	0	2	1	8	5	1	4	2	12	0	8	0	6	0	1
0	3	0	3	2	0	4	1	8	3	0	0	12	0	6	0	6
0	4	0	3	2	0	4	1	12	3	8	0	12	0	6	0	6
0	4	0	4	2	8	4	2	0	4	8	1	0	0	6	0	10
0	4	0	4	2	8	3	2	12	6	0	1	4	0	6	0	12
0	2	0	2	1	0	5	0	8	2	0	0	4	0	4	0	0
0	3	0	2	1	8	5	1	4	2	12	0	8	0	6	0	1
0	3	0	3	2	0	4	1	8	3	0	0	12	0	6	0	6
0	4	0	3	2	0	4	1	12	3	8	0	12	0	6	0	6
0	8	0	4	2	8	3	3	0	8	0	1	8	0	6	1	2
0	6	0	4	2	8	3	2	8	4	8	1	4	0	6	0	10
0	3	0	3	2	0	4	1	12	3	0	0	12	0	6	0	6
0	4	0	4	2	8	4	2	0	4	8	1	4	0	6	0	10
0	4	0	4	2	8	4	1	12	3	8	1	0	0	6	0	6
0	3	0	3	2	0	4	1	12	2	4	0	12	0	6	0	6

⁽³⁾ Count 1½ pounds of bread as 1 pound of flour.

⁽⁴⁾ Include white, brown, or maple sugars, sirups, molasses, jellies, preserves, candies, etc.

"protective" foods—milk, fruit, vegetables, and eggs. These are the foods richest in vitamins and minerals. If you must stint, stint last on these.

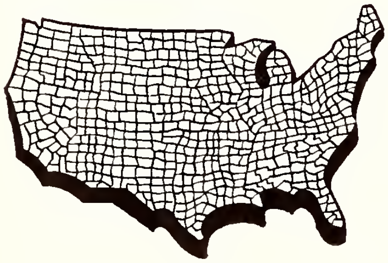
You can get help

In every city, county, and State in the Nation, there are trained and experienced people who can help you work out your food problems. We don't know their names, but you can find them through your telephone and government directories, through the schools, hospitals, professional associations, and institutions.

CITY

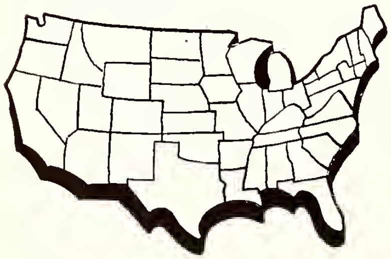
Teachers of Home Economics in high schools and colleges
Graduates of Home Economics courses
Nutritionists in social service agencies
Dietitians in hospitals, schools, factories
Doctors
Nurses
Home Management Specialists in relief organizations
Supervisors of Home Economics in Departments of Education
Public Health Department officials
Department of Markets officials
Weights and Measures officials

COUNTY



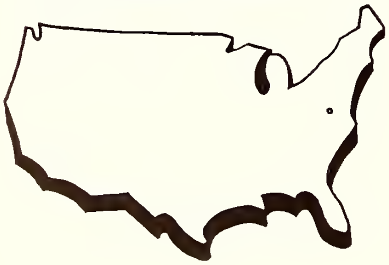
County Agricultural Agents
County Home Demonstration Agents
Agricultural Conservation Associations
Land Use Planning Committees
Farm Security Administration Home Supervisors
Public Health officials
Home Economics teachers in schools
County Sealers and Weights and Measures officials

STATE



Teachers of Home Economics in colleges and universities
Supervisors of Home Economics in Departments of Education
Nutritionists in relief organizations
Home Management Specialists in relief organizations
State Land Use Planning Committees
Department of Agriculture officials
Public Health Department officials
Public Welfare officials
Agricultural Adjustment Administration officials

WASHINGTON, D. C.



Consumer Commissioner, National Defense Advisory Commission
Bureau of Home Economics, Department of Agriculture
Consumers' Counsel Division, Department of Agriculture
Extension Service, Department of Agriculture
Farm Security Administration, Department of Agriculture
Surplus Marketing Administration, Department of Agriculture
Agricultural Marketing Service, Department of Agriculture
Food and Drug Administration, Federal Security Agency
Public Health Service, Federal Security Agency
Office of Education, Federal Security Agency
Social Security Board, Federal Security Agency
Children's Bureau, Department of Labor
Bureau of Labor Statistics, Department of Labor
Antitrust Division, Department of Justice
Federal Trade Commission
Work Projects Administration, Federal Works Agency

FOOD IS STRENGTH

AMERICA can dream that want will disappear. America can hope and live in hope that none will lack the food he needs. We can dream and hope, but we must also work.
We can work.
With our lands, and hands, and machines we have built greatly. We have raised from the earth buildings that soar a thousand feet. We have dammed gigantic rivers and made their waters do the work of millions. We have created cities and highways, factories and machines that are the marvel of the world.

We have worked at many things. We must do more.

We must work at this job of getting everybody a chance to earn a livelihood that includes the food he needs. We must make sure that our farmers, the most abundant producers on earth, will have the help they need to keep on raising food and saving soil. We must make our dollars buy the best and safest meals for all.

This means work.

We can start in our own homes. Make food do all the job it can do. Make certain each member of the family gets the food that keeps him strong and well.
We can look at our own communities, discover where meals are poor, why they are poor, how they must be enriched.
We can banish low incomes and waste, and abolish monopoly that chokes the flow of foods from farms to homes.

We have the talent to do all this vigorously, persistently, and in the ways of a democratic people.
We can make America strong by making Americans stronger.

This special issue of Consumers' Guide, prepared by the Consumers' Counsel Division of the United States Department of Agriculture, and issued by the Consumer Commissioner of the National Defense Advisory Commission, is dedicated to you who want to work at making America strong. We hope you will pass this booklet along to others, after you have read it.

◆

CONSUMERS' GUIDE is a publication of the Department of Agriculture, Washington, D. C., prepared by the Consumers' Counsel Division of that Department, and printed with the approval of the Bureau of the Budget as required by Rule 42 of the Joint Committee on Printing. Regular issues appear monthly from June through September, and semimonthly from October through May. A total of 150,000 copies are available for official free distribution. Additional copies may be obtained from the Superintendent of Documents, Washington, D. C., at 5 cents a copy, or by subscription at 50 cents a year, domestic; 80 cents a year, foreign. Postage stamps will not be accepted in payment.

D. E. MONTGOMERY, *Consumers' Counsel.*

VOL. VI, No. 20 **SEPTEMBER 1940**

U. S. GOVERNMENT PRINTING OFFICE 258533°

For the photographs in this issue our thanks go to the following individuals and agencies: Cover: Civilian Conservation Corps; page 2: Harris and Ewing; p. 3: Ben Heller, from Atlas Photos; p. 4: (1) Surplus Marketing Administration, (2) Extension Service, (3) Farm Security Administration, (4) FSA; p. 5: All from FSA; p. 6: (1) FSA, (2) Victor Lukens, (3) U. S. Public Health Service, (4) Theodor Jung; p. 7: (1) Information Office, U. S. Department of Agriculture, (2) CCC, (3) and (4) Lewis W. Hine; p. 8: (1) Doris Day, from Atlas Photos, (2) Association of American Railroads; p. 9: Imogen Cunningham, from Museum of Modern Art; p. 10: (1) Lewis W. Hine, (2) Soil Conservation Service, (3) Information Office, USDA, (4) Extension Service, USDA; p. 11: (1) USDA, (2) and (3) Work Projects Administration, (4) FSA, (5) USDA, (6) Extension Service, USDA, (7) Agricultural Marketing Service, USDA, (8) Information Office, USDA; pp. 12 and 13: Bureau of Home Economics, USDA.

1.94
AD422

LIBRARY
JAN 3 1941

CONSUMERS' GUIDE INDEX

VOLUME VI

April 15, 1939—September 1940

PUBLISHED BY CONSUMERS' COUNSEL DIVISION,
U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

For sale by the Superintendent of Documents, Washington, D. C. . . . . Price 50 cents a year; foreign 80 cents; single copies 5 cents.

United States Government Printing Office, Washington, D. C. - November 1940

INDEX OF SUBJECTS

Consumers' Guide

Volume VI

April 15, 1939 — September 1940

Listings in CAPITAL LETTERS indicate either the titles of articles, or articles dealing solely with the subjects indicated.

A

A, B, C GRADES
—FOR FRUITS AND VEGETABLES, No. 11, p. 10.
—FOR MEAT, No. 17, p. 3; No. 19, p. 2.
Pineapple Controversy, No. 19, p. 14.
ABUNDANCE, CONFERENCE ON, No. 4, p. 6.
Advertising (*See also* Federal Trade Commission)
—By States, No. 3, p. 11.
AGRICULTURAL ADJUSTMENT ADMINISTRATION ACT, No. 14, p. 6.
Consumer Interest in Program, No. 2, p. 7.
MATTRESS PROGRAM, No. 15, p. 3.
MEAT, No. 3, p. 3.
MILK MARKETING AGREEMENT, No. 10, p. 3.
— — —WASHINGTON, D. C., No. 12, p. 7.
OPERATION ON ONE FARM, No. 17, p. 13.
RANGE PROGRAM, No. 3, p. 3.
Soil Conservation (*See* Soil Conservation).
SOUTH, IN THE, No. 6, p. 3.
WHEAT PROGRAM, No. 5, p. 3; No. 11, p. 3.
WILDLIFE CONSERVATION, No. 9, p. 3.
Agriculture
—Advisory Council, No. 8, p. 2.
—EXPERIMENT STATIONS, No. 1, p. 13.
—Marketing Agreement Act of 1937 and Milk, No. 19, p. 7.
—Problem No. 1, Underconsumption, No. 13, p. 7.
—PROGRAM AND ABUNDANCE, No. 4, p. 6.
—Program and the War, No. 8, p. 2.
—WASTES, NEW USES FOR, No. 5, p. 9; No. 6, p. 10.
ANOTHER BATTLE AGAINST WASTE AND WANT, No. 5, p. 3.
Antipellagra Vitamin, No. 1, p. 14; No. 2, p. 7.
APPLES, No. 8, p. 9.
Ascorbic Acid (Vitamin C), No. 2, p. 7; No. 12, p. 6.
AT THE SIGN OF THE THREE BALLS, No. 1, p. 10.

B

Bacteria in Milk, No. 19, p. 7.
BEFORE YOU BUY A MATTRESS, No. 16, p. 6.
BELOW ZERO, No. 18, p. 6.
BIBLIOGRAPHY, A CONSUMER BOOKSHELF, No. 16, p. 10.
Books for Consumers (*See also* Consumers' Bookshelf), No. 16, p. 10; No. 18, p. 2.
—ON BUYING, No. 16, p. 10.
BOSTON DRINKS SURPLUS MILK, No. 10, p. 3.
Brands
Consumer Preferences, No. 12, p. 2.
Number of, No. 7, p. 8.
BUILDING A BOOKSHELF FOR BEGINNING BUYERS, No. 16, p. 10.
BUILDING SHELTERS AND LARDERS FOR WILDLIFE, No. 9, p. 3.
BUREAU OF BIOLOGICAL SURVEY, No. 9, p. 4.
BUREAU OF DAIRY INDUSTRY, NEW USES FOR MILK, No. 13, p. 10.
BUREAU OF HOME ECONOMICS, STANDARD CLOTHING SIZES, No. 2, p. 11.
BUYING MEAT BY GRADE, No. 17, p. 3; No. 19, p. 2.

C

Calcium (*See* Nutrition).
CALLING CANS TO ORDER, No. 6, p. 6.
CAN SIZES, No. 6, p. 6; No. 2, p. 14.
Carpets (*See* Rugs).
CHARTS, HOW TO DRAW, No. 9, p. 13; No. 10, p. 13.
Cheese, Food and Drug Actions on, No. 1, p. 2; No. 7, p. 2.
CHEMICAL RESEARCH IN AGRICULTURE, No. 5, p. 9; No. 6, p. 10.
Cincinnati, Consumer Activities, No. 5, p. 8.
CITRUS FRUITS, LIMES, No. 6, p. 15.
Clothing (*See* Textiles).
COFFEE, No. 12, p. 11.
Stimulants in, No. 18, p. 2.
COLD STORAGE LOCKERS, No. 18, p. 6.
Conservation (*See also* Soil Conservation).
—QUERIES, No. 16, p. 13.
—QUESTION BOX, No. 15, p. 6.
Consumer
—Activities
Cincinnati, No. 5, p. 8.
HOW TO DRAW FOOD CHARTS, No. 9, p. 13.
HOW TO DRAW YOUR OWN COST OF LIVING CHARTS, No. 10, p. 13.
How to Make Market Surveys, No. 12, p. 2.
Omaha, No. 7, p. 14.
Temporary National Economic Committee Hearings, No. 6, p. 6.
BOOKS FOR, No. 16, p. 10.
—BOOKSHELF (Continuing feature), No. 1, p. 9; No. 2, p. 12; No. 5, p. 13; No. 9, p. 5; No. 18, p. 2.
—Brand Preferences, No. 12, p. 2.
—Campaign for Meat Grades, No. 19, p. 2.
—Cooperation in the United States (*See also* Cooperatives), No. 1, p. 12.
—CREDIT (Series of articles), No. 1, p. 10; No. 3, p. 8; No. 9, p. 9.
CONSUMER-FARMER PROBLEMS, No. 4, p. 6.
ELECTRIC HOME AND FARM AUTHORITY, No. 7, p. 12.
FSA RURAL LOANS, No. 16, p. 3.
—Division, New York Action on Profiteering, No. 9, p. 2.

    —EDUCATION, No. 4, p. 6.
        College Course in, No. 5, p. 2.
        Discussion Group, No. 4, p. 9.
        Stephens College, No. 2, p. 2.
        Survey, No. 2, p. 2.
    —And Farmer, Joint Interest, No. 2, p. 5.
    —Guide, Subscription to, No. 16, p. 2.
    GOVERNMENT AGENCIES COOPERATING WITH (*See* Defense).
    —Organization, Fake, No. 4, p. 13.
    —Programs for Securing Better Diets (*See* Defense, Federal Surplus Commodities Corporation).
    —Purchases Study
        Mattress Purchases, No. 15, p. 3.
        Stocking Purchases, No. 11, p. 9.
        Washing Machines, No. 14, p. 12.
    —AND UNDERCONSUMPTION, No. 13, p. 7.
    —AND WAR, No. 8, p. 2; No. 9, p. 2; No. 8, p. 13.
    —YARDSTICKS, No. 11, p. 14.
Containers
    BEFORE AND AFTER, No. 15, p. 10.
    Deceptive (cans), No. 2, p. 14; No. 7, p. 2; No. 10, p. 9.
    Standards for, No. 3, p. 10; No. 6, p. 6.
COOPERATION (continuing feature), No. 1, p. 12; No. 3, p. 13; No. 5, p. 12; No. 6, p. 13.
Cooperatives
    Business, Extent of, No. 3, p. 13.
    COLD STORAGE LOCKER PLANTS, No. 18, p. 6.
    CREDIT, No. 9, p. 9.
    FARM SECURITY ADMINISTRATION, No. 16, p. 3.
    Food Stores, Analysis of Operations, No. 5, p. 12.
    Health Associations, No. 6, p. 13.
    HEALTH PROGRAM, FARM SECURITY ADMINISTRATION, No. 4, p. 3.
    Literature on, No. 6, p. 13.
    North Dakota State Agency for, No. 1, p. 12.
    R. E. A. SELF-HELP, No. 19, p. 8.
    WAY OUT OF WANT, No. 16, p. 3.
Corn, New Uses, No. 6, p. 10.
Cosmetics (*See also* Food and Drug Administration)
    Bleaching Creams, No. 4, p. 13.
    Laws, No. 2, p. 14.
    Prosecutions, No. 16, p. 2.
Cost of Living, No. 11, p. 14.
    CHARTS, HOW TO DRAW THEM, No. 9, p. 13; No. 10, p. 13.
COTTON
    MAKING MATTRESSES FROM SURPLUS, No. 15, p. 3.
    Mattresses, No. 16, p. 6.
    New Uses, No. 5, p. 10.
    STAMP PLAN, No. 13, p. 3.
    Stockings, No. 11, p. 7.
CREDIT UNIONS (*See also* Consumer Credit), No. 3, p. 8; No. 9, p. 9.
Crop Insurance, No. 5, p. 5; No. 11, p. 5.

D

DAYTON WORKS OUT WRINKLES IN THE FOOD STAMP PLAN, No. 8, p. 3.
Decatur, Illinois Meat Grade Campaign, No. 19, p. 2.
DECEPTIVE CONTAINERS, No. 15, p. 10.
    — —Under Food, Drug, and Cosmetic Act, No. 15, p. 2.
DEFENSE AND NUTRITION, Entire Issue, No. 20.
DIETS AND DEFENSE, Entire Issue, No. 20.
DIETS (*See also* Nutrition, Vitamins)
    COST OF, No. 11, p. 14.
    FOR LOW INCOME FAMILIES, No. 17, p. 10.
    Levels in South, No. 6, p. 3.
    Levels in United States, No. 1, p. 4.
DIVIDENDS FOR JUNIOR CONSUMERS, No. 9, p. 6.
DO YOU KNOW SIX PEOPLE? Consumer Education Program, No. 4, p. 9.
DRAW YOUR OWN COST OF LIVING CHARTS, No. 10, p. 13.
DRAW YOUR OWN FOOD CHARTS, No. 9, p. 13.
DRUG WARNINGS ON LABELS, No. 13, p. 13.

E

Eggs, Digestibility of, No. 18, p. 2.
ELECTRIC FARM AND HOME AUTHORITY, No. 7, p. 12.
ELECTRIC WASHING MACHINES, No. 14, p. 10.
ELECTRICAL APPLIANCES, FINANCING OF, No. 7, p. 12.
Electrification, Rural, No. 19, p. 8.
Erosion (*See* Soil Conservation).
EVER NORMAL GRANARY, No. 5, p. 3; No. 11, p. 3.
EXPERIMENT IN BETTER NUTRITION, No. 1, p. 3.
EXPERIMENT STATIONS, No. 1, p. 13.
Extension Service, Mattress Program, No. 15, p. 3.
Eyelash and Eyebrow Dyes, No. 16, p. 2.

F

Fallacies, Food, No. 5, p. 2; No. 12, p. 6; No. 18, p. 2.
FARM PRODUCTS, INDUSTRIAL USES, No. 5, p. 9; No. 6, p. 10; No. 13, p. 10.
FARM PROGRAM (*See also* SOIL CONSERVATION)
    —and Abundance, No. 4, p. 6.
Farm Security Administration
    Loan Program, No. 3, p. 2.
    MEDICAL CARE PROGRAM, No. 4, p. 3.
    RURAL REHABILITATION, No. 16, p. 3.
    WEAVING PROGRAM, No. 19, p. 3.
Farm Surpluses (*See* Federal Surplus Commodities Corp.).
Farmers and Consumers, Joint Interest of, No. 2, p. 5.
FARMERS' SHARE IN FOOD DOLLARS, No. 11, p. 14.
Fats
    Food Value in, No. 10, p. 9.
    —IN THE DIET, No. 15, p. 12.
    LARD, No. 15, p. 12; MARGARINE, No. 10, p. 5.
Federal Crop Insurance Corporation, No. 5, p. 5.
Federal Meat Inspection Act, Lard, No. 15, p. 14.
FEDERAL SURPLUS COMMODITIES CORPORATION
    COTTON STAMP PLAN, No. 13, p. 3.
    FIVE-CENT MILK PROGRAM, No. 10, p. 3; No. 17, p. 2.
    FOOD STAMP PLAN, No. 1, p. 3; No. 8, p. 3.
        Effect on Family Purchases, No. 10, p. 2.
        DAYTON, No. 8, p. 3.
    Lard, No. 15, p. 14.
    MATTRESS PROGRAM, No. 15, p. 3.
    SCHOOL LUNCH PROGRAM, No. 9, p. 6.
    SEWING PROJECT, No. 2, p. 3.
    Statement by F. S. C. C. President, No. 13, p. 7.
    Wheat Program, No. 5, p. 4.
Federal Trade Commission
    Action on Advertising Claims, No. 15, p. 2.
    Enforcement Method, No. 2, p. 14.
    Fake Institutions, No. 4, p. 13.
    Radio Trade Practice Rules, No. 7, p. 2.

Federal Trade Commission—(Continued)
  Study of Resale Price Fixing, No. 5, p. 2.
  Toothpaste Claims, No. 6, p. 9.
FIFTY WOMEN TALK IT OUT, No. 4, p. 6.
FINANCING FREEDOM FROM HOUSEHOLD DRUDGERY, No. 7, p. 12.
FINISHING YOUR FLOORS, No. 1, p. 6.
FIVE-CENT MILK PROGRAM, No. 10, p. 3; No. 17, p. 2.
Floor Coverings (*See* Rugs).
FLOORS, FINISHING, No. 1, p. 6.
FOOD AND DEFENSE, Entire Issue, No. 20.
Food and Drug Administration (Food, Drug, and Cosmetic Act)
  Amendment to, No. 6, p. 2.
  Bleaching Cream, No. 4, p. 13.
  Cheese, No. 7, p. 2.
  Coal Tar Color Testing, No. 15, p. 2.
  Coffee, No. 12, p. 12.
  Consumers Clause in Law, No. 1, p. 2.
  Cosmetic Laws, No. 2, p. 14.
  Cosmetic Prosecution, No. 16, p. 2.
  Deceptive Containers, No. 10, p. 9; No. 15, pp. 2 and 10.
  Drug Label Warnings, No. 13, p. 13.
  Hearings on Standards, No. 1, p. 2; No. 11, p. 2.
  Ice Cream, No. 4, p. 10.
  LABEL WARNINGS, No. 13, p. 13.
  Lard, No. 15, p. 15.
  Standards for Canned Fruits and Vegetables, No. 13, p. 2.
  Standards for Canned Peaches, No. 11, p. 2.
  State Laws, No. 2, p. 14.
  Vitamin Claims, No. 1, p. 2.
FOOD (*See also* Your Food Supplies and Costs)
  BUYING ADVICE, No. 17, p. 10.
  CARE, No. 16, p. 8.
  Consumption, No. 1, p. 4.
  —DOLLARS, FARMERS' SHARE IN, No. 11, p. 14.
  —Fallacies, No. 5, p. 2; No. 18, p. 2.
  —LORE AND FACTS, No. 12, p. 6.
  —Stamp Plan (*See* Federal Surplus Commodities Corp.).
  —SUPPLIES, CHARTING, No. 9, p. 13.
  —Supplies, Past and Present, No. 8, p. 13.
FOR HEALTH AND SAFETY GUARD YOUR FOOD, No. 16, p. 8.
FOR YOUR MEDICINE CABINET, No. 13, p. 13.
Freight Rate Differentials, No. 2, p. 8.
FROM GRASS TO CATTLE TO MEAT, No. 3, p. 3.
Fruits and Vegetables
  Canned, Standards for, under Food, Drug, and Cosmetic Act, No. 13, p. 2.
  GRADES, FOR, No. 11, p. 10.
  MARKETING IN NEW YORK, No. 12, p. 3.
FURNITURE, No. 19, p. 11.
  —WOODS, No. 18, p. 3.

G

GASOLINE GRADES, No. 5, p. 7.
Grades
  For Food, Pineapple Controversy, No. 19, p. 14.
  FOR GASOLINE, No. 5, p. 7.
  FOR MEAT, No. 17, p. 3; No. 19, p. 2.
  FRUITS AND VEGETABLES, No. 11, p. 10.
  As Trade Barriers, No. 3, p. 10.
GUARANTEED TO PERFORM AS LABELED, No. 15, p. 9.

H

HABERDASHERS TO THE NEEDY, No. 2, p. 3.
HAVE YOU TERMITES IN YOUR HOME? No. 14, p. 7.
HEALTH SECURITY FOR THE ECONOMICALLY INSECURE, No. 4, p. 3.
HOMESPUNS FOR FARM HOMES, No. 19, p. 3.
HOUSEHOLD CARE
  CLEANING WALLS, No. 3, p. 6.
  FLOOR FINISHES, No. 1, p. 6.
  —OF FOOD, No. 16, p. 8.
HOUSEHOLD EQUIPMENT
  FURNITURE, No. 19, p. 11; No. 18, p. 3.
  MATTRESSES, No. 16, p. 6.
  Pressure Cookers, No. 1, p. 14.
  REFRIGERATORS, No. 17, p. 6.
  RUGS, No. 7, p. 7.
  VACUUM CLEANERS, No. 1, p. 14.
  WASHING MACHINES, No. 14, p. 10.
HOW FARMERS SHARE IN CONSUMERS' FOOD DOLLARS, No. 11, p. 14.

I

ICE BOXES, No. 17, p. 6.
ICE CREAM, No. 4, p. 10.
Income Statistics, No. 11, p. 15.
INDUSTRIAL USES FOR AGRICULTURAL PRODUCTS, No. 5, p. 9; No. 6, p. 10; No. 13, p. 10.
INSECTS (*See* Pest Control).
INSIDE THE COFFEE POT, No. 12, p. 11.
Insurance, Crop, No. 5, p. 5.
INTEREST RATES ON SMALL LOANS, No. 1, p. 10.
INVESTING IN A BETTER LIVING FROM THE SOIL, No. 17, p. 13.
Iron (*See* Nutrition).
IT IS OUR LAND, No. 18, p. 12.

J

Juices, Experiments on, No. 1, p. 13.

L

Label Claims and Quality, No. 14, p. 2.
Labels (*See also* Brands, Textiles)
  —ON SEEDS, No. 15, p. 9.
  A. B. C. Grades, No. 11, p. 10.
  WARNINGS ON DRUGS, No. 13, p. 13.
LAND USE COORDINATION, No. 7, p. 3.
LARD'S PLACE IN THE LARDER, No. 15, p. 12.
Laws (*See* Food and Drug Administration, Mattress Law, Gasoline Grades).
LET'S WIPE IT OUT, No. 13, p. 7.
LIMES, No. 6, p. 15.
Linseed Oil, No. 1, p. 6.
LIVING STANDARDS IN THE SOUTH, No. 6, p. 3.
Loans (*See* Consumer Credit).
LOCKERS, COLD STORAGE, No. 18, p. 6.
LOOK TO THE SOIL, No. 14, p. 3.

M

Magna Carta, Consumer Clause in, No. 7, p. 14.
MAKING PLANS GROW LIKE PLANTS, No. 7, p. 3.

- Malnutrition, No. 1, p. 4.
- MARGARINE TAKES THE HURDLES, No. 10, p. 5.
- Market Surveys, How to Make Them, No. 12, p. 2.
- MARKETING FRUITS AND VEGETABLES IN NEW YORK, No. 12, p. 3.
- Mattress Law, No. 16, p. 7.
  - —PROGRAM, No. 15, p. 3.
- MATTRESSES, No. 16, p. 6.
- MEAT, AGRICULTURAL ADJUSTMENT ADMINISTRATION PROGRAM, No. 3, p. 3.
  - —GRADES, No. 17, p. 3; No. 19, p. 2.
  - Cooking, No. 1, p. 14.
- MEDICAL CARE, FARM SECURITY ADMINISTRATION, No. 4, p. 3.
- MEDICINE CABINET WARNING, No. 13, p. 13.
- MESSAGE TO CONSUMERS by Agricultural Adjustment Administrator R. M. Evans, No. 2, p. 5.
- MILK
  - Bacteria in, No. 19, p. 7.
  - CONSUMERS SPEAK UP, No. 12, p. 7.
  - —Drinks, No. 1, p. 13.
  - —Economies, No. 12, p. 10; No. 18, p. 15.
  - Five-Cent Milk In Washington, No. 12, p. 9.
  - FIVE-CENT MILK PROGRAM, No. 10, p. 3; No. 17, p. 2; No. 18, p. 15.
  - —GLOSSARY FOR CONSUMERS, No. 19, p. 6.
  - —HEARINGS IN WASHINGTON, No. 12, p. 7.
  - —MARKETING AGREEMENT, No. 19, p. 7.
  - INDUSTRIAL USES, No. 13, p. 10.
  - New Uses, No. 5, p. 10.
  - Nutrients, No. 18, p. 15.
    - Loss of, No. 13, pp. 11 and 12.
  - —Prices, Method of Determining, No. 12, p. 9.
  - —Products, No. 4, p. 10.
  - Skim, No. 18, p. 2.
  - Terms (*See* Milk Glossary).
  - —WASTE, No. 13, p. 10.
  - WHEY, No. 13, p. 10.
- Minerals (*See* Nutrition).
- Modernizing Weights and Measures Laws, No. 18, p. 12.
- Monopoly Committee (*See* Temporary National Economic Committee).

N

- National Bureau of Standards, Can Sizes, No. 6, p. 9.
- NATIONAL DEFENSE, and Food, No. 20.
- NATION'S EXTRA WHEAT BIN, No. 11, p. 3.
- NEW DEAL FOR YOUNG CONSUMERS, No. 2, p. 11.
- New Orleans Five-Cent Milk Program, No. 17, p. 2.
- NEW USES FOR OLD PRODUCTS, No. 5, p. 9; No. 6, p. 10; No. 13, p. 10.
- NEW YORK MARKETS, No. 12, p. 3.
- Nicotinic Acid, No. 1, p. 14; No. 2, p. 7.
- NORTH CAROLINA GASOLINE GRADES, No. 5, p. 7.
- NUTRITION (*See also* Vitamins, Diets)
  - —AND DEFENSE, Entire Issue, No. 20.
  - Fats, No. 15, p. 12 (*See also* Fats).
  - FOOD STAMP PLAN, No. 1, p. 3.
  - —LOW INCOME FAMILIES, No. 17, p. 10.
  - Milk, No. 18, p. 15.
  - Minerals
    - Calcium, No. 18, p. 2.
    - Iron, No. 12, p. 2; No. 17, p. 10; No. 18, p. 3.
  - NATIONAL GOAL, No. 13, p. 7.
  - —Programs for Consumers, No. 4, p. 2.
  - Skim Milk, No. 18, p. 2.
- Nuts, Shelled Meats to Cup, No. 11, p. 2.

O

- On the Consumer Front (continuing feature), No. 2, p. 14; No. 4, p. 13; No. 7, p. 14.

P

- PAWN SHOPS, No. 1, p. 10; No. 3, p. 8.
- Peaches, Standards Under the Food, Drug, and Cosmetic Act, No. 11, p. 2.
- Peanuts, New Uses, No. 6, p. 12.
- Pest Control
  - Fire Hazard in, No. 2, p. 3.
  - TERMITES, No. 14, p. 7.
- PHYSIOLOGY OF A GREAT CITY, No. 12, p. 3.
- Pillow Cases (*See* Textiles).
- Pineapple Parable, No. 19, p. 14.
- Planning (*See* Soil Conservation).
- PLANTS, POISONOUS, No. 18, p. 9.
- POINTERS ON POISONOUS PLANTS, No. 18, p. 9.
- Pressure Cookers (*See* Household Equipment).
- Price Relation to Quality, No. 14, p. 2.
- Profiteering, No. 8, p. 2.
  - New York City Action, No. 9, p. 2.
- Purchasing Power and Food Stamp Plan, No. 4, p. 2.

Q

- Quality
  - Grades (*See* Grades).
  - Relation to Price, No. 14, p. 2.
  - Study of, in Canned Corn and Tomatoes, No. 14, p. 2.
- QUIZ ON ICE CREAM, No. 4, p. 10.

R

- Radios, Trade Practice Rules, No. 7, p. 2.
- RANGE PROGRAM, No. 3, p. 3.
- REFRIGERATION, STORAGE LOCKERS, No. 18, p. 6.
- REFRIGERATORS, No. 17, p. 6.
- Relief Milk (*See* Five Cent Milk).
- RUGS, No. 7, p. 7.
- RURAL ELECTRIFICATION ADMINISTRATION, SELF-HELP CO-OPS, No. 19, p. 8.

S

- SCHOOL LUNCH PROGRAMS, No. 9, p. 6.
- SCIENCE LENDS A HAND TO CONSUMERS, No. 1, p. 13.
- SEED LABELS, No. 15, p. 9.
- SELF-HELP COOPERATIVES TURN THE TRICK, No. 19, p. 8.
- SEWING PROJECTS, No. 2, p. 3.
- Sheets (*See* Textiles).
- Shellac, No. 1, p. 6.
- Silk Stockings, No. 11, p. 7.
- SIMPLE AS A. B. C., No. 11, p. 10.
- Sirup Standards for Canned Fruit, No. 11, p. 2.
- SIX PROBLEMS IN SEARCH OF A SOLUTION, No. 2, p. 8.
- Skim Milk (*See* Milk).
- SLEEPING ON SURPLUS COTTON, No. 15, p. 3.

SO YOU ARE BUYING A REFRIGERATOR, No. 17, p. 6.
SO YOU ARE GOING TO BUY AN ELECTRIC WASHING MACHINE, No. 14, p. 10.
SOIL CONSERVATION (*See also* Soil Erosion)
  Achievements to Date, No. 16, p. 14.
  —Act, No. 3, p. 4; No. 14, p. 3.
  Agricultural Adjustment Administration, No. 15, p. 7; No. 16, p. 4; No. 17, p. 13.
  American Problem, No. 15, p. 6.
  Beginning of Program, No. 15, p. 7; No. 14, p. 5.
  Federal Agencies Engaged In, No. 16, p. 4; No. 15, p. 7.
  GREAT PLAINS STATES, No. 3, p. 3
  Dust Bowl Reclamation, No. 18, p. 12.
  Laws, No. 14, pp. 3 and 5.
  ON ONE FARM, No. 17, p. 13.
  Payments, No. 17, p. 13.
  PLANNING, No. 7, p. 3; No. 16, p. 14.
  PROGRAM ON ONE FARM, No. 17, p. 13.
  —Service Work, No. 16, p. 13.
  Watershed Control, No. 18, p. 13.
  WESTERN RANGE PROGRAM, No. 3, p. 3.
  IN THE SOUTH, No. 6, p. 3.
  WHEAT, No. 5, p. 3.
  WILDLIFE, No. 9, p. 3.
Soil Depletion, Definition of, No. 15, p. 6.
SOIL EROSION, No. 14, p. 3.
  Agricultural Adjustment Administration, No. 15, p. 7.
  America's Problem, No. 15, p. 6.
  Annual Cost in Dollars, No. 14, p. 5.
  Definition, No. 15, p. 6.
  Extent of Damage, No. 14, p. 3.
  RANGE PROGRAM, No. 3, p. 3.
Soil Leaching, No. 15, p. 6.
SOUTH LOOKS TO THE SOIL, No. 6, p. 3.
Soy Beans, New Uses, No. 5, p. 10.
Spinach, No. 18, p. 2.
Stamp Plan (*See* Federal Surplus Commodities Corporation).
STAMP PLAN FOR COTTON, No. 13, p. 3.
STANDARDS (*See also* Grades)
  CAN SIZES, No. 6, p. 6.
  CLOTHING SIZES, No. 2, p. 11.
  Containers, No. 3, p. 10.
  Food, Drug, and Cosmetic Act, No. 13, p. 2.
  Music, No. 4, p. 13.
  Peaches Under the Food, Drug, and Cosmetic Act, No. 11, p. 2.
  TRADE BARRIERS, No. 3, p. 10.
STANDARDIZING STANDARDS, No. 3, p. 10.
Stockings (*See* Textiles).
STRETCH YOUR FOOD DOLLAR, No. 17, p. 10.
SUGAR, No. 10, p. 10.
  —Cane, New Uses, No. 6, p. 10.
SUMMER TIME IS LIME TIME, No. 6, p. 15.
Sunburn Creams, No. 4, p. 13.
SURPLUS COTTON, MATTRESS PROGRAM, No. 15, p. 3.
Surplus Foods (*See* Federal Surplus Commodities Corporation).

T

Temporary National Economic Committee Consumer Hearings, No. 6, p. 6.
TERMITES, No. 14, p. 7.
TEXTILES
  CLOTHING SIZES, No. 2, p. 11.
  FARM SECURITY WEAVING PROGRAM, No. 19, p. 3.
  MATTRESSES, No. 16, p. 6.
  RUGS, No. 7, p. 7.
  Sheets and Pillow Cases, No. 1, p. 2.
  STOCKINGS, No. 11, p. 6.
  WPA SEWING PROJECTS, No. 2, p. 3.
Thiamin, No. 2, p. 6.
TIPS FOR RUG BUYERS, No. 7, p. 7.
TRADE BARRIERS
  MARGARINE, No. 10, p. 5.
  STANDARDS, No. 3, p. 10.
  State Legislative Action On, No. 6, p. 2.
  TRANSPORTATION REGULATIONS, No. 2, p. 8.
TURNING WASTE INTO WEALTH, No. 6, p. 10.

U

UNDER CONSUMPTION, No. 13, p. 7.

V

Vacuum Cleaners (*See* Household Equipment).
Varnish, No. 1, p. 6.
Vitamin A, No. 2, p. 6.
  B, No. 2, p. 7.
  C, No. 1, p. 14; No. 12, p. 6.
  Concentrates, No. 2, p. 6.
  D, No. 2, p. 7.
  E, No. 2, p. 7.
  FANCIES AND FACTS, No. 2, p. 6.
  G, No. 2, p. 7.

W

WALLS, CLEANING, No. 3, p. 6.
WAR
  —AND FOOD SUPPLIES, No. 8, pp. 2 and 13.
  —and Prices, No. 9, p. 2.
WASHING MACHINES, No. 14, p. 10.
WATCH FOR APPLES, No. 8, p. 9.
Weights and Measures
  Broadcast, No. 3, p. 2.
  Check Weighing in Omaha, No. 7, p. 14.
  Contest Winner, No. 3, p. 2.
  Los Angeles, No. 3, p. 2.
  New York City, No. 7, p. 14.
  NEW YORK, No. 8, p. 12.
  Texas, No. 3, p. 2.
  Wood, No. 13, p. 2.
WE'LL HAVE ENOUGH FOOD NEXT YEAR, No. 8, p. 13.
WHAT KIND OF WOOD DO YOU WANT? No. 18, p. 3.
WHAT'S IN AMERICA'S SUGAR BOWL? No. 10, p. 10.
WHEAT PROGRAM, No. 5, p. 3; No. 11, p. 3.
WHEN CONSUMERS RUN THEIR OWN BANKS, No. 9, p. 9
WHEN YOU BUY STOCKINGS, No. 11, p. 6.
Whey, No. 5, p. 10.

WHEY GOES TO THE SOUTH POLE, No. 13, p. 10.
WILDLIFE CONSERVATION, No. 9, p. 3.
Wood, Weights and Measures, No. 13, p. 2.
WOODS AND FURNITURE, No. 18, p. 3.
WPA
  SCHOOL LUNCH PROGRAMS, No. 9, p. 6.
  SEWING PROJECTS, No. 2, p. 3.
  Standard Clothing Sizes, No. 2, p. 11.

Y

YOUR FOOD SUPPLIES AND COSTS (continuing feature), No. 1, p. 15; No. 3, p. 15; No. 4, p. 15; No. 5, p. 15; No. 7, p. 15; No. 12, p. 14; No. 13, p. 15; No. 14, p. 14; No. 15, p. 15; No. 17, p. 15; No. 18, p. 15; No. 19, p. 15.

275125 U. S. GOVERNMENT PRINTING OFFICE